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ORIGINAL LECTURES.

ON TUBERCULOSIS, AND THE EVIDENCES OF THE DEPOSIT OR FORMATION OF TUBERCLE IN THE CHILD.

A LECTURE (a) DELIVERED AT THE

Hospital for Sick Children.

By WILLIAM JENNER, M.D.,

Physician Extraordinary to the Queen; Physician to University College Hospital, and to the Hospital for Sick Children.

GENTLEMEN,—Whoever desires to comprehend the diseases of infant life must view them in conjunction not only with the diseases of adult life, but also in their relation to the diseases of declining life. The pathological processes of the one period throw light on those of the other. Now, it is the consideration of some easily-understood physiological or pathological condition in the child which enables us to understand the less patent disease in the aged, and then it is some easily-understood pathological process in the aged which throws light on an obscure point in the diseases of the child. He, then, who would study successfully the diseases of childhood must study them as part of the great field of pathology, and not merely as a specialty. To devote time to the study of this or of that special disease in its relation to other diseases is most useful to him who studies and to those who are to profit by his studies. To study this or that disease, or set of diseases, as a mere specialist, to view them by themselves only, is to cramp your own minds, to obtain a narrow view even of the special subject,—to injure yourselves mentally, and to retard the progress of scientific and even of mere practical pathology.

Before passing to the special diseased states to which I propose in this and the succeeding lectures to direct your attention, allow me briefly to review some of those peculiarities in the structures, the physiology, and the habits of the child which dispose it to diseases never seen in the adult, modify those common to both, make rare those frequent in after life, and exclude those we daily witness in the aged.

The body of the child is growing. The organs and functions by which the building up of the frame is performed are in full activity; they are more perfect than in after life; the power of repair in the child is marvellous. There is no degeneration of structures essential to life or to the progress of growth. Only parts which have finished their work, have contributed probably to the perfecting of other parts essential to the perfecting of the body, decay or degenerate, *e. g.*, the thymus.

I must for a moment break the thread of my discussion, to tell you what I mean by this word "degenerate," so much abused in its use. I mean by it changes of the intimate structure of tissues or organs, independent of life force. The chief degenerations of the structures of the body observed by the pathologist may be grouped under three heads:—1. Disintegration of structures, *e.g.*, granular degeneration of muscular fibres. 2. Precipitations on to or into the elementary constituents of tissues and organs, *e.g.*, calcifications of various parts. 3. Re-arrangement of chemical elements, *e.g.*, fatty degeneration.

The body of the child is growing. Hence, not only is there activity of all the building-up functions, but there is imperfect formation, and consequent imperfect performance of function of many of the parts which are being built up, *e.g.*, the bones.

Contrast this with the state in old age; not only has the body then ceased to grow, but all its parts have passed by the date of their perfection. The structures especially concerned in building up the frame are no longer needed, they have long been inactive, and inactivity of a function involves the degeneration of the structures performing it. They have then either disappeared or are degenerating prior to disappearing. The power of repair is almost *nil*, and death by old age is death by the degeneration of structures, and consequent imperfect performance of functions essential to life. It is no longer parts which have finished their building-up work which degenerate, it is those concerned in the preservation of life itself which decay. The more gradual and the more general the degeneration, the more correctly do we speak of such death as death from old age. It is rare, as you well know, for all the parts to degenerate equally and to that degree that the functions of all cease together. Usually, some one organ passes to decay more rapidly than the others, and death is said to occur from the lesions of this or of that one organ—as the old watch that has long ceased to keep time at last stops, because some one part necessary to the movements of its hands has worn a little faster than the others. All its structures are more or less decayed, but it finally ceases its work because the balance-wheel breaks, the chain gives way, the main-spring snaps.

If, now, we consider the tendency of special parts to degenerate, we find the lymphatic glands, the spleen, Peyer's patches. the solitary glands of the small intestines, all actively at work in the child. The lymphatic glands are large; the Malpighian bodies of the spleen are swollen; Peyer's patches and the solitary glands are prominent. In middle life they all begin to waste, and they go, like the thymus, when the function of building up is done; when perfection has been reached; when life begins only to flag, and long ere we like to say old age is on us.

There is one tissue which plays so large a part in the performance of some of the functions essential to the continuance of life, and the importance of the decay of which has hitherto, it seems to me, been imperfectly appreciated, that I must for an instant direct your especial attention to it—I mean the elastic tissue.

A loss of elasticity gives its most characteristic aspect to age. Think of the smooth cheek of the child, and compare it in your minds' eye with the wrinkled skin of the aged; and remember how large a part in this difference is played by the difference in the elasticity of the skin at the two extremes of life. You know the influence which the elasticity of the coats of the arteries plays in the circulation. In the child the elasticity of the arteries is at its maximum. Bend the child's arm, and see how perfectly the brachial artery follows the changing length of the limb between the elbow and the axilla; then bend the arm of the old man, and note how the same artery is thrown into an S-shape coil—it has lost the power of retracting, and therefore of adapting itself to the diminution of the length between the elbow and the axilla when the forearm is flexed on the upper arm. (b) Granular disintegration of its structure, precipitation of albumen and fibrin, and of calcareous granules into them, and re-arrangement of their chemical elements have taken place. The one or other of these degenerations predominating in different cases, the elasticity as well as the contractility of the vessel is lost, and thus the whole of the arteries are practically lengthened; (c) friction is therefore increased, and undue impediment to the flow of blood through them is the consequence, and the enlargement of the heart, said to be proper to the aged, necessarily follows.

It is, in reference to the subjects we are reviewing, of interest to note the fact that it is common for special parts to experience the decay proper to age, not only before the period of life at which such decay is the natural course of events, but also long before other parts of the body decay. Thus, one man is old as regards his scalp—his hair is grey, or his hair-follicles have decayed and wasted so as no longer to perform any function, and the man is bald; in another it is the alveoli which waste before their time; in a third the heart and arteries; in a fourth the nervous system, etc.

This tendency of particular parts to grow old before due time, is sometimes hereditary. Early baldness, early falling

(a) This Lecture was introductory to a short Course of Lectures on the subject.

(b) If an equal length of the artery be removed from a young and an old subject after death, and the elasticity of the two arteries tested, the difference is very remarkable, and that even when to the eye the artery of the old person appears healthy. The whole arterial system degenerates at the same time, and, consequently, the state of the brachial artery is an index to those of heart and head. I have collected many facts indicating the importance of this subject and its bearing on diseases of various organs.

(c) As in the healthy person, the length of the artery varies with the positions of the limb, and as the artery scarcely shortens when its coats are degenerated, it is, of course, practically speaking, lengthened. If the disease be extreme, then it is actually lengthened, as shown by its tortuous condition. When the limb is extended dilatation of the artery necessarily accompanies the lengthening.

of the teeth, and an early aged-look, we all know, occur in many members of the same family at about the same period of life. So, also, we see member after member of the same family cut off about the same age by apoplexy, by heart-disease, by asthmatic complaints as they are called. These diseases being the result, in fact, of degenerations occurring at or about the same period of life,—the arteries, or the heart, or the lungs having been so constructed originally, as to begin to decay after so many years of ordinary wear,—though care may retard, abuse hasten the decay, and so anticipate or delay the term natural to the individual. Men are old, then, physiologically considered, not when they have lived so many years, but when the structures essential to life have degenerated to a degree almost incompatible with the continuance of life.

In my Lectures given in this place last year, I contrasted the state of the nervous system, and especially the reflex nervous system, in childhood and age, I need not repeat what I then impressed on you.

Applying what I have said to the special diseases of childhood, we understand that as malformations and rickets are diseases of development and of rapid growth, they must be limited to childhood; that as the mechanical inspiratory apparatus is imperfect in the child (from the softness of ribs and cartilages), bronchitis must be very fatal to it; that from the irritability of the reflex nervous system convulsive affections of excentric origin will be common in early life; that as the lymphatic system, the glands of Peyer, the spleen, etc., are in a state of activity in childhood and youth, they will be prone at that time to certain diseases; that as syphilis, tuberculosis, and scrofulosis are the most hereditary diatheses, they will manifest themselves early; that as diseases of the arteries, veins, and heart,—excluding acute inflammations and malformation and their effects,—are the consequences of degenerations, they will be unknown in infancy; that hæmorrhage into the brain and softening of that organ (excluding softening from acute œdema), being due in the vast majority of cases to degenerative disease of the arteries, will be infinitely rare in childhood; that as cirrhosis of the liver and kidneys and certain stomach diseases result, in the vast majority of cases, from intemperance, they will be very rare before puberty. And so we might pass in review the whole of those diseases which are proper to, unknown in, rare in, or especially mortal in early life, and trace these peculiarities of each to established physiological or pathological laws.

In the Lectures which I gave in this room last year, I directed attention to one of the most widely spread of the diathetic diseases of childhood, viz., rickets. To-day, and in my succeeding Lectures I propose to consider another great diathetic disease so common in, though not like rickets proper to, childhood, viz., tuberculosis.

As when describing rickets I drew altogether from my own experience, so in describing tuberculosis and its consequences, I shall draw my descriptions as little as possible from the observations of others, and shall limit myself to what I have seen. I shall have to leave out little of importance, because the large field which this Hospital affords for the study of this common disease affords ample opportunities for observing all its chief general varieties and local developments. There are three words I shall so constantly use, to which such different meanings have been attached, that it will be necessary for me to explain the meaning I attribute to them.

When I say a child is tubercular, I mean that it has tubercles in one or more of the tissues or organs of its body. When I say a child is tuberculariziug, I mean that tubercles are being deposited or formed in one or more of the tissues or organs of its body. And when I say a child is the subject of tuberculosis, I mean that it is from some general state of all its parts disposed to tubercularize.

In the adult, and yet more so in the aged, occupation, exposure, mental wear, the passions, and accidental diseases, have so modified the general aspect of the man, that although much may still be learned by the practised eye, without a question to the patient, still we are often far from correct in our surmises. It is very different with the child; in reference to its diseases the eye is the great inlet of knowledge. It is so in regard of tuberculosis. The ear and the touch, the test-tube and the microscope, give us no aid in the diagnosis. We judge almost solely from inspection of the patient.

It is when tuberculosis is inherited from the parents that its characteristic features are the most strongly marked. The germ anterior to the formation of the blood, and even before it has divided into parts, is the subject of tuberculosis, and, as a consequence, the parts formed from and by that germ partake of its constitution; and we see the result, not in this or in that part, not in the blood or bones only, but in every fibre and every cell of the frame, at least in every part made up of such cells. Let me sketch for you the appearance of a child who is the subject of well-marked tuberculosis,—one concerning whose predisposition to become consumptive we should have no doubt. I did so briefly in the lectures I gave here last year, when contrasting the leading features of tuberculosis, scrofulosis, rickets, and syphilis.

The child's loveliness is often the pride of the parents; they are charmed with its tall and thin figure, its straight and thin limbs, the delicacy and transparency of its skin, the clearness of its complexion, the beauty of its eyes, so bright, with so large pupils, and so long lashes, the oval contour of its face, and the silkiness of its hair; it is so forward, so intelligent, so clever. It lives rapidly, it cuts its teeth early, it talks before others, it quickly runs alone.

In the mother's and the poet's eye—and every mother is a poet when describing her child—the child is a pretty little fairy; in the Physician's eye it is an interesting pathological specimen. If we examine such a child a little more closely, we find that its bones are all small in circumference, long, and singularly firm; that its cartilages are comparatively soft. We press our stethoscope on its sternum, and we are surprised to find how easily it is depressed—*i. e.* how flexible are the cartilages. The ends of its long bones are very small, and on cutting them through vertically, we are struck by the thinness of the layer of cartilage which, in the state of preparation for ossification; instead of being, as in rickets, greatly increased, it is in tuberculosis diminished. Health is intermediate. This difference is most striking in the ribs—*i. e.* at the points where the ribs unite with the costo-sternal cartilages: in rickets, a row of nodules; in health, ditto; in tuberculosis, *nil.*

But there is another important difference between the state of the ribs in the rickety child, the healthy child, and that the subject of tuberculosis—I mean the firmness of the ribs. In rickets, the softness of the ribs modifies all its chest disease in regard of symptoms and danger, and give to the chest that remarkable form with which we are familiar. In tuberculosis, the ribs, in common with all the bones, are even firmer than in health; and the consequence is, that any diminution in the size of the lungs must be followed by a very different alteration in the shape of the thorax from that which occurs in rickets. In rickets, supposing an impediment exists to the entrance of the air, the soft ribs are thrust in by the weight of the atmosphere, and of course recede or are driven in farthest at the part where they are the softest.

Now we may lay down this law in regard of the diseases of the lung—that all diminution in the size of one or both lungs, if not accompanied by the presence of air or fluid in the pleura, necessitates the falling in of the chest parietes; the walls of the chest follow the receding lung. In tuberculosis the lungs are small; they do not grow with the increasing length of the trunk; they are not only absolutely, but relatively to the height, small; and bear in mind that this want of size in the lungs is anterior to the deposit of tubercle. It is not the upper lobe which is especially affected—every part of the lung seems equally diminished in size; but while diminished in size absolutely and relatively, we often find its air-vesicles dilated—the lung rarified. There is no damage in texture—no loss of elasticity—only a little dilatation of air-vesicles, compensating a little, and but a little, for the smallness of the organs.

I told you that the chest-walls must follow (no air or fluid being in the pleura) the receding lungs; and that little lungs necessitated a small thorax. In rickets the softness of the ribs permits of their being driven in by the weight of the atmosphere. In tuberculosis the firmness of the ribs forbids such a change. Nature here uses other methods for diminishing the capacity of the chest.

We find three forms of thorax in those who are the subjects of tuberculosis, all three consequent on the small lungs of the child. 1. The long, almost circular, thorax. 2. The long thorax with narrow antero-posterior diameter. 3. The long pigeon-breasted thorax. The key to the understanding of the two first is afforded by the thorax of the aged, who are the subjects of atrophous emphysema, or senile atrophy

of the lung. As the lung diminishes in size the ribs become more oblique, and as a consequence the four upper intercostal spaces next the sternum are remarkably widened, the four lowest almost obliterated. The sixth, seventh, eighth, and ninth ribs are united at an acute angle with their cartilages—the ribs passing downwards, the cartilages upwards,—to be affixed to the sternum or to cartilages above. The result of this alteration in the obliquity of the ribs is that the antero-posterior and the lateral diameters of the thorax are greatly diminished, and the diaphragm, remaining as regards its highest point at its proper level, is necessarily by the lowering of its attached margin considerable more arched than natural; while a certain number of the ribs, in some cases even the eighth, ninth, tenth, eleventh, and twelfth ribs—lie in contact over the greater part of their extent with the diaphragm—have, that is to say, no lung under them. In this way, although the thorax is much lengthened, its capacity is greatly diminished.

The cause of this form of thorax in the old person whose lungs atrophy is the almost absolute inflexibility of their outer chest walls, the result of their costal cartilages being to a great extent calcified. Then, whenever the cartilage and the ribs in the child, adult, or aged person are particularly firm and the lungs atrophy generally, the thorax obtains the form I have described; we get the long, circular thorax, with narrow but pretty equal antero-posterior, and lateral diameters, oblique ribs, wide upper intercostal space next sternum, and obliterated lowest intercostal spaces.

Now, if you have followed my line of argument, you will have already understood the cause of the difference between the flat and the circular long thorax. The difference is due to the relative softness of the cartilages in the two. If the cartilages be soft you will have the chest flattened from before backwards, as well as lengthened; and if they be very soft you will have the sternum below the level of the cartilages (d).

The third form, viz., the long thorax with pigeon breast, is the consequence of repeated trifling catarrhs affecting the lower lobes of the lungs of a child whose lungs generally are small. The air during the catarrh being unable to find ready access into the lower lobes of the lungs, the lower ribs are driven inwards at each descent of the diaphragm, bearing the sternum forward. The degree to which the sternum is advanced will depend on the height to which the impediment to the entrance of the air extends in the lungs, or, rather, in the bronchi. The sixth and seventh ribs have, I think, the greatest effect in advancing the sternum. If a child be constitutionally healthy and suffer repeatedly from bronchitis, we ultimately obtain the same form of thorax; for a certain amount of collapse becomes permanent, and the lower lobes of the lungs are permanently diminished in size.

How is this last form of thorax to be distinguished from the pigeon-breasted thorax of rickets? In the early stage there is no danger of confounding the two; but when the ribs have consolidated, I have often seen the one mistaken for the other. There is, however, little difficulty in distinguishing the deformity consequent on rickets from that I am now describing. In the pigeon breast from rickets, all the ribs being softened, the deformity extends certainly as high as the second rib. In the pigeon breast from catarrh or bronchitis, the upper part of the thorax is flattened from before backwards; it is only the lower end of the sternum which is thrust forward. The child is pigeon-breasted, but it is only pigeon-breasted at the lower part of its chest.

We often find, in conjunction with this form of thorax, a knuckling forward of the cartilages just next to the sternum, the yielding cartilage being compressed between the solid rib and sternum.

I desire, then, fully to impress on you that small lungs are common in the child who is the subject of tuberculosis, and that the form of thorax which in the child indicates small lungs is one of the three I have described.

By inspection we detect these forms of thorax; the eye, then, is the great inlet of knowledge here as in reference to the general aspect of the child when seeking to determine its disposition to become tubercular. When I come to speak of the physical signs which indicate that the child is tubercularising or even tubercular, we shall see more fully the importance of the knowledge the eye conveys to us. How often is a child and even a young adult tubercular in the most extensive degree without our being able to prove by auscultation, percussion, or palpation, that any organ or tissue is the seat of tubercle? The build of body characteristic of tuberculosis is not, however, always notable when the disposition to the deposit of tubercle is considerable; and this is to be expected, seeing that tuberculosis is admitted to be sometimes acquired after the building up of the body is nearly or quite complete. And again, when tuberculosis is inherited from one parent, the transmitted influence of the non-tubercular parent may modify the aspect of the child.

The deposit or formation of tubercle may take place slowly or rapidly. Tuberculization may therefore be acute or chronic; but I need scarcely remind you that there is no sharp line of demarcation between the acute and chronic forms of any given disease. There is no disease that occurs as an acute affection and also as a chronic affection but offers all intermediate terms of duration. Tuberculization in the child is distinguished from tuberculisation in the adult by the large number of organs in which the deposit occurs at or about the same time and by the small amount of the deposit at one spot. It is this latter which makes palpation, percussion, and auscultation so often small aids in the diagnosis of tubercle, and which compels us to trust especially to a study of the general symptoms, of the conditions appreciable by the eye, and of the etiology of the disease.

Symptoms of Acute Deposit of Tubercle.—Children rarely tuberculize acutely without they inherit from one or both parents a disposition to become tubercular, or have recently been the subjects of measles or whooping cough, or have been placed in singularly unfavourable hygienic conditions as regards air and light. With regard to these latter, they are, like errors in diet, more often merely exciting causes of tuberculization in the child already the subject of tuberculosis, than the originators of tuberculosis itself. The cases of acute tuberculization that I have seen may be grouped so as to form three varieties, which we may call the insidious, the active febrile, and the adynamic.

In the first variety the child is observed to be languid, to be unwilling to make exertion, sits or lies about, leaves its playmates, is dull and heavy or irritable in temper; the skin is hot, but the degree of heat varies much. At some parts of the day it is scarcely greater than natural; at others it is, as the mother says, burning. The thermometer shows that there is an appreciable difference in the temperature at different parts of the day and on different days. At times it is almost or quite natural; at times it rises to 102°, and even higher. On the whole, the elevation of temperature is most marked at night. Usually when the temperature is high the cheeks, one or both, are flushed. It is the irregular feverish heat which makes the greatest impression on the mother. The pulse is always frequent, but very rapid when the temperature is high. The tongue is furred more or less, and the lips and nares dry, and often bleeding from picking. The appetite is lost or variable, and only to be excited by tasty and indigestible substances; the bowels confined or irregular; the stools more or less clay-like, or putty-like, or pale, or party-coloured and offensive. The abdomen is free from tenderness and normal in form. There is usually a trifling cough, rapid breathing, and may be the physical signs indicative of slight catarrh, or the respiratory murmur is rough, respiration more blowing than natural. From first to last the child steadily, and if the febrile disturbance be considerable, rapidly loses flesh.

All the special symptoms I have mentioned may vary in severity, and sometimes one, sometimes another gives a peculiar feature to the case. Now, the fretfulness, or headache, or drowsiness, or sleeplessness leads the Practitioner to consider all the other symptoms secondary to some special intra-cranial disease. Now, it is the furred tongue and the deranged intestinal secretions which lead him to the erroneous conclusion that the febrile disturbance, etc., are secondary to the state of the stomach, bowels, or liver. Again, it may be the catarrhal symptoms that predominate, and the disease is supposed to be a bad cold on the chest merely. The child may be ill enough only to keep the house or its room. After three, four, five, or six weeks even, the disease terminates in one of two ways, either some one organ becomes so gravely affected as to cause death with symptoms unequivocally referrible to that, or the child recovers.

(d) Various functional derangements of the heart, basic murmurs, etc., result from the caging up of the heart when the antero-posterior diameter of the thorax is thus much shortened.

If the child dies we find after death, in addition to the lesion which caused death, grey granulations scattered through the lungs, the liver, the spleen, the kidneys, under the pleuræ and peritoneum, and grey and yellow tubercles in the lymphatic glands, especially the bronchial and mesenteric. Note that I tell you that grey as well as yellow are found in the lymphatic glands. You will find it stated generally in books that grey tubercles are not found in the lymphatic glands. This is indisputably an error. They are common enough in the interior of all the lymphatic glands.

Suppose the child to recover, what was the condition of its organs?—undoubtedly they too were the seat of tubercle. An acute deposit of tubercle is constantly recovered from. It is by no means a necessarily fatal disease; nay, I feel satisfied that recovery from it is very common. The foundation for a belief in the possibility of recovery from an attack of acute tuberculization rests mainly on anatomico-pathological ground, or on these superadded to the history of the patient.

After death we every now and then find scattered through the lungs solid nodules, varying in size from a swan-shot to a large pea, and may be even larger. On section we find the centre formed of a hard, tough, almost black airless substance; about the margin of this we may find a number of small grey granulations, each surrounded by black pigment loaded tissue; and then again, perhaps, outside these transparent grey granulations free from pigment, and evidently deposited during the last illness of the patient. The centre of such a nodule is formed of obsolescent tubercle, the layer around of tubercles becoming obsolescent. The patient has manifestly had three attacks of acute tuberculization, from two which he had recovered, for obsolescence is evidence of recovery, and in the third of which he has died. The bronchial glands, etc., in many cases give equally valuable and trustworthy evidence of recovery from acute tuberculization.

With reference to diagnosis in these cases, it rests mainly on the irregular febrile disturbance, *i.e.* the high but variable temperature lasting for some time, and the steady loss of flesh, with the absence of any evidence of local lesion of a grave kind. The gravity of the case is constantly, even by the experienced Practitioner, unappreciated till some one organ is suddenly so severely affected as to place life in the greatest danger.

I will sketch for you a case that occurred long ago in my own practice, and made an impression on me not to be forgotten. The patient was five years of age, and the child of a Medical man. The child had recently suffered from an attack of measles, from which it had recovered quickly, but had soon seemed ill again. She lost her appetite, and sat about listlessly, neglecting her toys, not all day, but only playing with them occasionally, and then with little spirit. Her brothers and sisters worried her. She was taken out of doors; was thought by her mother and myself, even at that time, to want routing. Routing did not answer, and she was noticed to flush in the face and be feverish at night. Now I observed her tongue was loaded, and learned that she had been coaxed with tasty, indigestible food; so I said, "It is all error of diet." The diet was regulated, but the child did not improve. On going in one day, and seeing the child look brighter, more lively, and its skin cool, I said, "Jenny is better to-day." "Oh no, I assure you," was the reply; "she seemed as well yesterday afternoon, and then all last night she was in a burning fever." I examined the stools; they were fetid, dark, and too solid. "Yes, it is no wonder that with such a state of secretion the child is feverish at night," I said: "A dose of grey powder and jalap will put all right." But it did not put all right. The excreta were improved; the diet was all that could be desired; and then I began to think, is not the mother making more of the ailment than it deserves? And so one, two, three weeks wore on, when a sudden attack of convulsions occurred, and in three or four days the child was dead from tubercular meningitis. Every organ in the body was found, after death, to be the seat of a recent deposit of grey granulations.

In the active febrile form of acute tuberculization the febrile symptoms are more decided from the outset, and the patient at an early period is confined to bed. In the third or adynamic form of acute tuberculization, the illness begins somewhat suddenly, after at least a trifling sense of malaise of a few days' duration. The symptoms are chilliness, hot skin, frequent pulse, moist furred tongue, headache, loss of appetite, confined bowels, vomiting, considerable sense of weakness, great unwillingness to be disturbed, with irritability of temper. After a week or ten days, the mind wanders occasionally. The bowels are usually confined, and the abdomen flat or concave. Now and then, however, the stools are relaxed, and the belly swollen. The skin continues hot, dry, and harsh; the tongue becomes dry and brown; sordes collect about the teeth; prostration is extreme; and the patient sinks about three or four weeks after the outset of the disease

ORIGINAL COMMUNICATIONS.

STATISTICS OF

AMPUTATIONS AT THE LEEDS GENERAL INFIRMARY DURING EIGHT YEARS.

By THOMAS P. TEALE,
Surgeon to the Infirmary.

After the example of Mr. Bryant at Guy's Hospital, and Mr. Cooper and Mr. Holmes at St. George's, I propose to give a statistical account of all the amputations performed at the Leeds Infirmary during eight years, from January 1, 1853, to January 1, 1861. In this account, amputation at the shoulder and other joints will not be included, since they differ so much from amputations involving section of bone, as scarcely to admit of being grouped along with them.

The operations included in this report were performed by Mr. S. Smith, Mr. S. Hey, and myself. They have been recorded in the Hospital Note-book of Operations by the successive House-Surgeons, Mr. Roulstone, Dr. Hardwick, and Mr. Jessop. To the latter gentleman I am indebted for the following tables, which have been carefully arranged by him from the Note-book of the Hospital.

These tables, for the sake of uniformity, are arranged upon the plan adopted in the Guy's and St. George's reports.

ALL THE AMPUTATIONS PERFORMED AT THE LEEDS GENERAL INFIRMARY FROM JAN. 1, 1853 TO JAN. 1, 1861.

	Patho-logical.			Expe-dieney.			Primary.			Secondary.			Total.			
	Cured.	Died.	Per Cent.	Cured.	Died.	Per Cent.	Cured.	Died	Per Cent.	Cured.	Died.	Per Cent.	Total.	Cured.	Died.	Per Cent. and Average.
Thigh .	27	6	18·18, or 1 in 5·5	2	1	33·3, or 1 in 3	2	5	71·4, or 1 in 1·4	..	6	..	49	31	18	36·7, or 1 in 2·7
Leg	50	7	12 2, or 1 in 8·1	1	1	50, or 1 in 2	10	3	23, or 1 in 4·3	..	2	..	74	61	13	17·5, or 1 in 5·7
Arm	4	2	33·3, or 1 in 3	..	..	..	17	9	34·6, or 1 in 2·8	1	1	50, or 1 in 2	34	22	12	35·3, or 1 in 2·8
Forearm	9	..	..	..	..	..	16	1	5 9, or 1 in 17	5	1	16·6, or 1 in 6	32	30	2	6·2, or 1 in 16
	90	15	14·3, or 1 in 7	3	2	40, or 1 in 2·5	45	18	28·5, or 1 in 3·5	6	10	62·5, or 1 in 1·6	189	144	45	23·8, or 1 in 4·2

Amputations of all Kinds.—During eight years 189 amputations have been performed, followed by 45 deaths, showing a mortality of 23·8 per cent. The mortality from all amputations at Guy's was 25·3 per cent., at St. George's 27·6.

Of the 189 amputations, 49 were of the thigh, the mortality being 36·7 per cent.; 74 of the leg, with a mortality of 17 5 per cent.; 34 of the arm, mortality 35·3 per cent.; 32 of the forearm, the mortality 6·2 per cent.

From this statement the mortality of amputations of the arm appear unusually large. It is, however, explained by the fact that of 34 amputations of the arm 28 were traumatic, having generally resulted from severe accidents by machinery, often attended with serious injuries of other parts of the body.

The *causes of death* in the 45 fatal cases were as follows:—

Pyæmia	in 24
Secondary hæmorrhage	4
Exhaustion	4
Shock	4
Other causes	5
Causes of death not recorded	4
	45

Under the head of pyæmia are included 11 cases in which pyæmic deposits, with or without low inflammation of serous membranes, were found after death; 4 cases in which there was found low inflammation of serous membranes, presumed to be caused by poisoning of the blood with putrid serosity or other matters; and 9 cases in which the existence of pyæmia was inferred from the symptoms, which, however, were so strongly marked as to allow no reasonable doubt of the existence of purulent or putrid poisoning of the blood.—The number of these cases, 9 in 24, not verified by examination after death is large, but it is explained by the removal of the bodies from the Hospital, by the friends, immediately after the death of the patients, in order to prevent such examinations being made.

Four deaths from secondary hæmorrhage are recorded: one after a pathological circular amputation of the thigh; one in a pathological rectangular amputation of the thigh; one in a traumatic rectangular amputation of the thigh; and one in a pathological posterior-flap amputation of the leg.

Four deaths are ranked under the vague term "exhaustion." In none of these cases was there an examination after death. One sank under obstinate diarrhœa at the end of one month; one case of traumatic gangrene requiring amputation was followed by gangrene of the stump; in one, amputation was performed on account of extensive sloughing from diffuse cellulitis, fatal in six weeks; and one case of traumatic amputation of the leg was followed by gangrene of the stump and death in one week.

Four fatal cases are referred to shock, the patients having never rallied after the operation—namely, a traumatic amputation of the leg; a pathological amputation of the leg in a very feeble subject; a traumatic amputation of the arm in a child aged 22 months; and a traumatic amputation of the arm.

In the five following cases death occurred from causes not referable to any of the foregoing classes—namely, a traumatic amputation of the thigh in a drunkard, in whom a fatty heart was found after death, which occurred on the twentieth day; an amputation of the thigh for encephaloid disease of the calf, fatty heart being discovered after death, and also trichina spiralis throughout the whole system of voluntary muscles; a pathological amputation of the leg, death from phthisis shown after death; and a traumatic amputation of the forearm, followed by fever, delirium, and death, no examination allowed.

In four cases the cause of death is not recorded.

From the foregoing statement, it appears that, if we deduct four cases, of which the cause of death is not recorded, death was caused by pyæmia in 24 of 185 amputations of all kinds, or in the proportion of 13 per cent. of all the amputations; and in 24 of 41 fatal cases, or in the proportion of 58·5 per cent. of the fatal cases. Pyæmia proved fatal in 8 of 16 deaths after pathological amputations, or in 50 per cent.; and in 16 of 25 deaths after traumatic amputations, or in 64 per cent.

Secondary hæmorrhage was fatal in 4 of 185 amputations of all kinds, or in 2·16 per cent., and in 4 of 45 fatal cases, or in 8·8 per cent.

Pathological and Traumatic Amputations.—Of the whole 189 amputations, 110 were pathological and 79 traumatic. In this pathological class are included 5 cases ranked in the table as amputations of expediency, after the plan of Mr. Bryant; namely, one of the leg for carcinoma of the foot, which proved fatal from pyæmia; one of the leg for carcinoma of the foot, which recovered; one of the thigh for myeloid of the femur, which recovered; one of the thigh for encephaloid of the calf, which was fatal, fatty heart and extensive distribution of trichina spiralis being found after death; and one of the thigh for cartilaginous tumour of the tibia, which recovered.

The 110 pathological amputations were followed by 17 deaths, a mortality of 15·45 per cent.; namely, 36 of the thigh, showing 7 deaths; 59 of the leg, showing 8 deaths; 6 of the arm, showing 2 deaths; and 9 of the forearm, all of which recovered.

The 79 traumatic amputations were followed by 28 deaths, or in the proportion of 35·4 per cent.; namely, 13 of the thigh, with 11 deaths (6 of these amputations were secondary, and all fatal); 15 of the leg, of which 5 died (2 of the amputations were secondary, both fatal); 28 of the arm, showing 10 deaths (2 of these were secondary, of which 1 died); and 23 of the forearm, giving 2 deaths (of these 6 were secondary, and 1 of them fatal).

Of the 79 traumatic amputations, 63 were primary, with 18 deaths, a mortality of 28·5 per cent.; on 16 secondary, with 10 deaths, or 62·5 per cent.

Amputations of the Thigh.—Of 49 amputations of the thigh 18 proved fatal; the deaths being 36·7 per cent. At Guy's Hospital the deaths were 27·27 per cent; at St. George's Hospital 32·9 per cent.

Of the 49 amputations of the thigh at the Leeds General Infirmary 36 were pathological, including 3 of expediency. Of these, 7 were fatal, or 19·4 per cent. Of the 13 traumatic cases 11 died, or 84·6 per cent. Of these 7 were primary, of which 5 died, and 6 secondary, which were all fatal.

Amputations of the Leg.—74 amputations of the leg were followed by 13 deaths, or 17·5 per cent. At Guy's Hospital the amputations of the leg gave a mortality of 37 per cent; at St. George's Hospital 32·5 per cent.

Of the 74 amputations of the leg at the Leeds General Infirmary 59 were pathological, including 2 of expediency. Of these 8 died, or 13·5 per cent.; and 15 traumatic, with 5 deaths, two of these being secondary and both fatal, or 33·3 per cent.

Amputations of the Arm.—Of 34 of these amputations 12 were fatal, a mortality of 35·3 per cent. At Guy's Hospital the mortality was 12·9 per cent.; at St. George's Hospital 13·7. Of the Leeds cases 6 were pathological with 2 deaths, and 28 traumatic with 10 deaths.

Amputations of the Forearm.—In 32 of these amputations there were 2 deaths, or 6·2 per cent. At Guy's Hospital the per centage was 8·3, and at St. George's Hospital there were 11 cases without a death.

Relative Mortality of Different Modes of Amputating.—In estimating the value of different modes of amputating, we can scarcely arrive at a just conclusion by comparing the results at different Hospitals, as there is undoubtedly a great difference in their sanitary conditions. I regret to be compelled to state that, in this respect, the Leeds Infirmary is unfavourable. It is an old building, with ill-constructed and sadly over-crowded wards. The evil of this condition is often observed in cases where prolonged effort at repair is required. It is rare to find this Hospital altogether free from erysipelas or pyæmia. Other circumstances, not at first sight apparent, may influence the result of one mode of operating as compared with another. The fairest comparisons, however, which can be made, unless they are conducted on a very large scale, are by contrasting the operations performed in the same Hospital, and for the most part by the same Surgeons. On this account the relative results of the circular and flap amputations at St. George's Hospital are of great value. It has been there shown, by Mr. Cooper and Mr. Holmes, that the flap operation was followed by a mortality double that of the circular. These gentlemen very justly observe, that more extensive data are required to prove beyond question that this excess is constant; and, if so, that clinical observation must be called in to show the cause upon which it depends. It is very remarkable that, at the Leeds Infirmary, an opposite result has been obtained, as will appear below.

Comparison of Circular and Flap Amputations.—To compare the results of these operations as observed at the Leeds Infirmary, it is necessary to deduct from the whole number of 189 amputations, 103 in which the rectangular was performed. Of the remaining 86, 31 were circular, 8 double flap, 32 posterior flap, and 15 irregular. By the posterior flap operation is meant the amputation of the leg by a long flap from the calf, as described by Mr. Hey in his "Surgical Observations." Under irregular amputations are included those operations in traumatic cases, in which, from irregular injuries of the soft parts, the Surgeon was obliged to make a cover for the stump from whatever quarter it could be obtained.

If, then, we throw into one class the 8 double-flap amputations and the 32 posterior-flap, we have 40 flap amputations

to contrast with 31 circular, and the following are the results :—

Of the 31 circular amputations 12 proved fatal, or 38·7 per cent.; namely, 4 pathological of the thigh with 1 death, 7 traumatic of the thigh with 4 deaths, 1 pathological of the leg, 1 traumatic of the leg, and 1 pathological of the arm, which recovered; 8 traumatic of the arm with 3 deaths, 3 pathological of forearm with one death, and 6 traumatic of forearm with 1 death.

Of 8 double-flap amputations 3 were fatal; 3 pathological of the thigh recovered, as did 1 traumatic of the leg; 1 pathological and 1 traumatic of the arm proved fatal; 2 traumatic of forearm with 1 death.

Of the 32 amputations by the posterior flap, with 6 deaths, 24 were pathological with 4 deaths, and 8 traumatic with 2 deaths.

In the whole of these 40 flap amputations (8 double flap and 32 posterior flap) there were 9 deaths, a mortality of 22·5 per cent.; whereas, in 31 circular amputations there were 12 deaths, or 38·7 per cent. This larger fatality of the circular than of the flap amputations is the reverse of the results observed at St. George's Hospital. These comparative results may be stated as follows :—

At St. George's Hospital there were 97 circular amputations with 20 deaths, a mortality of 20·6 per cent.

At the Leeds General Infirmary 31 circular with 12 deaths, or 38·7 per cent.

At St. George's Hospital 41 flap amputations with 19 deaths, or 48·7 per cent., being a mortality double that of the circular.

At the Leeds General Infirmary 40 flap amputations with 9 deaths, or 22·5 per cent.

Comparison of Rectangular with other Amputations.—Of 189 amputations of all kinds, 103 were by the rectangular operation, and 86 by other methods.

AMPUTATIONS BY OTHER METHODS THAN THE RECTANGULAR.

	Pathological.			Expediency.			Primary.			Secondary.			Total.			
	Cured.	Died.	Per Cent.	Cured.	Died.	Per Cent.	Cured.	Died.	Per Cent	Cured.	Died.	Per Cent.	Total.	Cured.	Died.	Per Cent. and Average.
Thigh ..	6	1	14·28, or 1 in 7	..	..	..	1	5	83·3, or 1 in 1·2	..	1	..	14	7	7	50, or 1 in 2
Leg	20	3	13, or 1 in 7·6	..	1	..	8	3	27·2, or 1 in 3·6	..	2	..	37	28	9	24·3, or 1 in 4·1
Arm	1	1	50, or 1 in 2	..	..	..	11	7	38 8, or 1 in 2·6	..	..	..	20	12	8	40, or 1 in 2·5
Forearm	4	..	..	..	..	..	8	1	11, or 1 in 9	1	1	50, or 1 in 2	15	13	2	13·3, or 1 in 7·5
	31	5	13·9, or 1 in 7·21	..	1	..	28	16	36·3, or 1 in 2·7	1	4	80, or 1 in 1·25	86	60	26	30·2, or 1 in 3·3

In these 86 amputations by other methods than the rectangular there were 26 deaths, a mortality of 30·2 per cent. In 103 rectangular operations there were 19 deaths, a mortality of 18·4 per cent.

If we subdivide these two groups the following results are obtained :—

Of the 86 amputations by other methods than the rectangular, 37 were pathological with 6 deaths, a mortality of 16·2 per cent. Of 103 rectangular amputations 73 were pathological, of which 11 died, a mortality of 15 per cent.

Of the 86 amputations by other methods than the rectangular 49 were traumatic with 20 deaths, a mortality of 40·8 per cent. Of 30 rectangular traumatic amputations 8 died, or 26·6 per cent.

Remarks.—On reviewing the foregoing statements, additional confirmation is obtained of a fact already well established, that traumatic amputations are much more fatal than pathologieal; the rate of mortality at Leeds in the traumatic being 35·4 per cent., in the pathological 15·4 per cent.

RECTANGULAR AMPUTATIONS.

	Pathological.			Expediency.			Primary.			Secondary.			Total.			
	Cured.	Died.	Per Cent.	Cured.	Died.	Per Cent.	Cured.	Died.	Per Cent.	Cured.	Died.	Per Cent.	Total.	Cured.	Died.	Per Cent. and Average.
Thigh ..	21	5	19·2, or 1 in 5·2	2	1	33·3, or 1 in 3	1	..	..	..	5	..	35	24	11	31·4, or 1 in 3·18
Leg	30	4	11·7, or 1 in 8·5	1	..	..	2	..	..	..	..	..	37	33	4	10·8, or 1 in 9·2
Arm	3	1	25, or 1 in 4	..	..	..	6	2	25, or 1 in 4	1	1	50, or 1 in 2	14	10	4	28·5, or 1 in 3·5
Forearm	5	..	..	..	..	..	8	..	..	4	..	..	17	17	..	..
	59	10	14·5, or 1 in 6·9	3	1	25, or 1 in 4	17	2	10·5, or 1 in 9·5	5	6	54·5, or 1 in 1·8	103	84	19	18·4, or 1 in 5·4

In the traumatic cases the secondary proved much more fatal than the primary; the rate of mortality of the secondary being 62·5 per cent., of the primary 28·5 per cent.

On comparing the mortality of rectangular with that of other amputations, the advantage is here shown to be obviously on the side of the rectangular, although the general results in this respect are scarcely equal to those obtained in the earlier of these operations.

The more favourable results which have hitherto attended the rectangular method, I am inclined to attribute chiefly to two causes; first, to the more complete covering of the end of the bone secured by this method, and secondly, to the avoidanee of irritation and distress in the subsequent treatment; the repeated liftings of the stump, the strappings, and the circular bandagings, usually required in other amputations to prevent the retraction of the soft structures, being unneeessary in the rectangular.

In Hospitals when erysipelas and pyæmia are prevailing, stumps frequently "open out," suppurate, or become phagedenic. But when rectangular stumps are thus affected, and life is preserved, the resulting stump is, with very rare exceptions, a good one. In several cases, apparently most unpromising, although the stump has lain long without showing a disposition towards repair, yet when recovery was at length accomplished, there was a soft moveable mass of tissues over the end of the bone, almost as satisfactory as in the cases which had done well from the beginning.

After ordinary amputations it is admitted by Surgeons of great experience, that exfoliation and necrosis are *frequent*. After rectangular amputations they are *rare*. After 103 of these operations, in two eases only, and to a very small extent, have exfoliation or necrosis come under the knowledge of my colleagues or myself.

In some of the cases of rectangular amputation published in the journals, sloughing of the long flap is occasionally noticed. Our Hospital records show that it is about equally frequent but less extensive in this as compared with other modes of operating. The following short extracts from the note-book show all the notices which it contains of sloughing of the stump. It thus appears that in 103 rectangular operations, sloughing occurred to a greater or less extent, in 8, as follows :—

1. Thigh, pathological, one inch of slough.
2. Leg, traumatic, one corner.
3. Thigh, pathological, one ineh and a-half slough, exeellent stump.
4. Leg, pathological, a little sloughing.
5. Leg, pathological, a little sloughing.
6. Arm, traumatic, some sloughing, good stump.
7. Leg, pathological, sloughing of considerable portion.
8. Leg, traumatic, considerable sloughing.

In 86 amputations, not reetangular, sloughing is recorded in 6, as follows :—

1. Thigh, pathological, double flap, some sloughing and exfoliation.

2. Thigh, traumatic, circular, considerable sloughing and sequestrum.
3. Leg, pathological, double flap, some sloughing.
4. Leg, traumatic, irregular, considerable sloughing.
5. Arm, traumatic, irregular, sloughing.
6. Forearm, traumatic, circular, extensive sloughing, and bone exposed.

From these records it appears that, so far as the cases at the Leeds Infirmary are concerned, sloughing is a more serious affair in the general amputations than in the rectangular. It should also be stated, in reference to the rectangular operation, that, in consequence of its being a new proceeding, minute deviations from a satisfactory state were noticed; whereas in the other and earlier operations, slight degrees of sloughing have probably occurred, and have not been thought worthy of notice.

As far as sloughing in rectangular amputation of the leg is concerned, a circumstance may be mentioned which has, I believe, in some instances, been the cause of it. I allude to the wounding of the anterior tibial artery at the base of the flap. This accident may be avoided by observing the following rule. The long anterior flap having been marked out by carrying the two lateral incisions through the integuments only, and the transverse incision through all the structures down to the bone, the aponeurosis covering the muscles in front of the leg should next be divided throughout the whole length of the flap close to the edge of the tibia on one side, and of the fibula on the other. This being done, there is little need for the further use of the knife, as the finger is almost sufficient to detach the mass of muscles upwards from the interosseous ligament, more especially in the situation of the artery, a few touches of the knife being only required laterally to separate the muscles from the bones.

The most marked advantage of the rectangular amputation is seen in the character of the stump produced by it. The perfection of a stump may be tested by its ability to bear pressure on its extremity, and thereby to favour free locomotion. I can with confidence state that, with scarcely an exception, in the cases under the observation of the Surgeons of the Leeds General Infirmary, these stumps allow of a firm bearing of their extremity on the bottom of the socket of the artificial limb, and, consequently, give to the patient great stability and confidence in walking; while the circular and double-flap stumps rarely can bear pressure on their extremity, and the subjects of such stumps have to remain contented with the uncertain support which is derived from the apparatus resting on the head of the tibia, or on the tuberosity of the ischium.

On the grounds which have now been stated, namely, the somewhat lessened mortality, the greatly diminished suffering in the after treatment, and the vastly superior condition of the stumps, so far as comfort and usefulness are concerned, my colleagues and myself during an experience of six years have adopted the rectangular as our general mode of amputating, deviating from it from necessity, and not from choice, in such cases only in which the extent of the injuries or the disease renders the rectangular amputation impracticable or undesirable.

The following table of the two classes of amputations, as practised during each of the eight years embraced in this record, will show the extent to which the rectangular has, in our estimation, superseded the other methods of amputating:—

	Amputations not Rectangular.	Rectangular Amputations.
1853	23	—
1854	22	—
1855	13	6
1856	8	11
1857	9	21
1858	2	19
1859	2	16
1860	7	30

Leeds.

CASTRATION FOR EPILEPSY.—Dr. James J. Rooker, of Castleton, Indiana, reports a case in the *Cleveland Medical Gazette*, of castration for the cure of epilepsy evidently dependent upon the habit of excessive masturbation. The patient was thirty-five years of age, and the disease remarkably severe. The operation has proved entirely successful.—*Chicago Medical Journal.*

ON THE ACTION OF CERTAIN SUBSTANCES UPON PHTHISIS.

By RICHARD PAYNE COTTON, M.D.
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No. VI.—PHOSPHORUS.

THE generally admitted tonic and stimulating action of phosphorus, as well as its existence in so many of the important structures of the body, made me anxious to try its effects upon phthisis. I accordingly administered it to twenty-five unselected in-patients of the Consumption Hospital, those only being excluded in whom the disease was too far advanced to expect that any kind of treatment would avail much, or in whom there existed some gastric or other complication, which would seem to render the phosphorus inadmissible.

Of the twenty-five patients, ten were in the first, four in the second, and eleven in the third stage of consumption. Eleven were males, and fourteen females. Their ages varied from nineteen to fifty-five years. Perhaps I should here mention the mode in which the phosphorus was administered. Ten grains of phosphorus and an ounce of oil of sweet almonds, were put into a phial, and exposed to the heat of boiling water for half-an-hour; the solution, when cold, being carefully strained through blotting paper. By this process, which is that recommended in the Prussian Pharmacopœia, four grains of phosphorus remain in permanent solution. Of this, from five to eight or ten minims were given twice or three times a-day, suspended in a little mucilage, and disguised by cinnamon water. Five minims would contain one-twenty-fourth of a grain of phosphorus. The dose, according to its effects, was continued for a longer or shorter period, the longest being eight weeks, the shortest, one week.

Of the twenty-five patients, four improved *greatly;* five improved *slightly;* and sixteen either made no progress at all, or became worse. Nine gained in weight; twelve lost weight; and four remained unchanged in this respect. In one case the gain amounted to eight pounds in one month; in another to fourteen pounds in two months; but in each of the other cases where there was an increase, the gain was trifling, not exceeding one pound.

In eleven instances the appetite sensibly diminished, and in two or three of these cases the phosphorus evidently occasioned gastric disturbance, accompanied by diarrhœa; but in the other fourteen patients, the appetite remained good, and in some of them actually improved under the treatment.

Of the four *greatly* improved cases, one (in the first stage of the disease) quite regained his health; and the other three (two of whom were in the first, and one in the third stage) left the Hospital materially improved in every respect, their coughs having diminished, and their general health being greatly restored. Of the five *slightly* improved, some gained a little in weight, but three at least of them seemed to profit more when the phosphorus was exchanged for steel and quinine. Of the sixteen cases apparently uninfluenced by the phosphorus, several improved under the subsequent use of other tonics.

The observations of my late esteemed and lamented colleague, Dr. Theophilus Thompson, upon the use of phosphorus in phthisis (a) are far from encouraging. He believed that, in some instances, it might act favourably as a stimulant, but that its effects even in such cases were transient. I am not aware of any other published record of the influence of this substance in any of the varieties of tuberculosis.

All things being considered—the fact that improved diet, diminution of care, and quietude, are of themselves sufficient to effect a very great improvement among the patients at the Consumption Hospital, especially on their first arrival, I cannot help coming to the following conclusions, viz.:—

1. Phosphorus exerts no *specific* action upon consumption.
2. In some cases it seems to act as a tonic and stimulant; but its influence, even in this respect, is inferior to many other remedies of a similar kind.
3. Although in many cases it seems to agree very well with those who take it, yet it sometimes occasions loss of appetite, nausea, and abdominal derangement.

Clarges-street, Piccadilly.

(a) "Clinical Lectures on Consumption," page 97.

Medical Times and Gazette.

SATURDAY, JULY 6.

THERAPEUTICS.

Whilst a popular contemporary is beginning a new volume by an onslaught on the grocers, and by researches into the honesty of the British tradesman, our readers may think that we better fulfil the office of a Medical Journal by inquiring into some of those principles of Medical Science most canvassed at this time. So we begin by discussing the right and the wrong bases of Rational Therapeutics. Let us begin by putting a case.

Two men set themselves the task of learning French. One of them, a very shallow dog, but of a shrewd, practical turn of mind, and hating all unnecessary trouble, went to Paris, threw himself as it were into the language, and by dint of daily talking with shopkeepers, grisettes, and people he met casually in the *cafés*, he soon got a very useful and fluent command of the French of every-day life. The other was a man of thoroughly plodding, laborious and conscientious habits, who loved to get to the bottom of things, hated mere smatterings, and was never satisfied with a knowledge of what *is*, unless he also could learn the why and the how. So he set to work upon Bopp, Donaldson, and Max Müller; he possessed himself of all the existing speculations on the origin of language and the primary roots of words; got a good knowledge of the leading families of speech, of the various tongues which were fused together to make the Latin, of the progeny of Romanesque languages which succeeded it, of the French of various epochs down to the present, and of the *rationale* of the changes which have occurred in its orthography and grammar. So, after years of study, he found himself with a vast increase of mental capacity, and with an exact critical knowledge of any French composition that could be laid before him; but in the familiar talk of daily life he was non-plussed: in carrying on a common conversation in society he was dead beaten by his shallow friend, who did not know the derivation of a single word he uttered.

Pardon this parable, courteous reader, for we think it has a useful moral. The shallow, fluent chatterer, never at a loss for a word, puts us strongly in mind of the Medical man who used to begin his Professional career by helping his master to compound medicines, and seeing him prescribe for the patients who daily came to him. Long before he learned anything of physiology or pathology, or diagnosis (if ever he learned them at all), he obtained a skill in compounding medicines which should not disgust a reasonable stomach, and of administering them at convenient times. He found out "what cures what," and was able to remove a great many morbid conditions absolutely, and though there were others which he could not deal with in this way, he still was able to give very great relief to the most troublesome symptoms; he was, in fact, what the Greeks called εμπείρικος, and we, "a practical man;" for he could attain certain ends by certain means, though he knew nothing of the why or the wherefore, and often was very much in the dark as to what was really going on under his eyes.

The profound student, who failed in the small talk of common life, is like the man who learns his Profession radically, thoroughly, and scientifically, that is, all but one small part of it (as he thinks it) to wit—Therapeutics. He begins with a good classical and mathematical education, then studies chemistry, and animal and vegetable physiology, and structural anatomy; then he takes up regional anatomy, pathology, and diagnosis; he becomes able to discriminate the exact place of any derangement which may affect the human body, and its nature; to predict the consequences, and to tell, in *general* terms, the line of treatment applicable; but when it comes to the actual particular details, his medicines are too nasty to be swallowed, or perhaps they are trivial and inert, or directed at inconvenient times and doses; or while a grand line of treatment is directed, the patient's sleep or appetite, or some lesser matter, on which his comfort depends, may be neglected; and in fact, on however grand and comprehensive a scale our Physician's knowledge may be, it does not comprise a familiar working acquaintance with the power of drugs and diet, and the relief of symptoms.

We only give expression to an opinion current in the Profession, when we say that therapeutics, as a branch of Medical study, is neglected generally, and that it is especially neglected by some of our members whose Professional achievements are of the highest order, so far as relates to the scientific basis of their art. We hear constantly such observations as these, "A. is a splendid morbid anatomist, and a first-rate hand at diagnosis; but his treatment is whimsical, objectless and inert, and he always seems to be thinking, not how he shall turn out his patients cured, but how they will cut up at a post-mortem. It is at this particular ceremony that, if he finds his diagnosis correct, he enjoys the climax of Professional satisfaction." Or rather, let us give as an example the following remarks, which once passed between a very intelligent woman and the writer:—"So your husband has had the gout! How did you like Dr. So-and-So?" "Oh! very clever no doubt, but what I call a rather hard and comfortless Doctor." "Do, pray, explain; for there is no one who is reputed to know more of the gout than he does." "Well, I can only answer you by comparing him with dear old Mr. ——, our former attendant. Mr. ——'s treatment may or may not have been so scientific or so good in the long run, but he always attempted to make the patient comfortable; he gave him something soothing at night, and suggested something that would please the appetite, without transgressing the proper kind of diet. Dr. —— never seemed to care for trifles; but trifles are a great deal to a man in bed with the gout." To give another illustration, let us quote a conversation between two students who had been "going round" with Dr. Minutissimus at the Hospital of the πανάγια θεότοκος, London, W. Said Thrifty to Idle, "Now really, my dear fellow, you ought to take advantage of these splendid opportunities; you may become a first-rate stethoscopist if you like, but I see you never pay any attention to the clinical teaching." Said Idle to Thrifty, "What's the use of it? Every patient has a drachm of *liquor ammoniæ acetatis* every four hours, and I can give that without taking all this trouble."

If, then, we correctly interpret the sentiments of the Profession, we believe that the study of Therapeutics does not possess the rank which it deserves to hold, and that it is neglected or disparaged by some men of high attainments in other branches of Professional knowledge. Nor need we go far for the reasons of this state of things.

In the first place, because therapeutics, or in other words a familiar acquaintance with the handling of remedies and alleviation of symptoms, is often the sole branch of Medical knowledge possessed by men whose education and mental training are not of the highest order, it is apt to be despised by the loftier spirits. Any old woman or any fool, they say, can learn to compound doses for colic, and to palaver with mothers in their nursery. Therefore (they seem to argue) what the fool can do so easily, is beneath the notice of the philosopher. Besides this, it must be confessed, that the practice of therapeutics, and the modes of teaching it, and the way in which facility can be acquired in the practice

of it, are different from those concerned in the exact sciences or in the laboratory. There is little scope for triumphant demonstration, and as little for hard plodding of the abstruse, reflective sort. The boy who was first in the classics may be beaten here by the boy who was first in the cricket field. Good animal spirits, tact, patience, sagacity, kindly feeling —all the faculties which make a man quick at seeing signs and taking hints, and estimating facts almost too petty to be formally weighed and measured, these are the qualities for a good therapeutist.

But, forasmuch as therapeutics ought to be the very end and climax of Medical knowledge, it seems as absurd to despise it, as it would be in the farmer to expend labour in draining, digging, and tilling the soil, and then neglect to gather in the harvest, or as it would be in the hard-working man of business to toil day and night, and then neglect to collect in his accounts, and to secure proper remuneration for his labours (not an unfrequent fault, by-the-by, with Medical men). The very end of anatomy, of physiology, animal chemistry, and pathology, is the relief of suffering. There can be no doubt that the man who is furnished with these instruments for estimating the kind, place, intensity, and complications of the disease he has to deal with, and who has learned the numerical exactitude, the careful observation, and the cautious sifting of alleged facts, for which we are indebted to the modern chemico-pathological school, is, if he chooses to take the trouble, infinitely better prepared to practise therapeutics, than the man who has had no scientific training; and that with these the empirical routineer can be fairly beaten on his own ground. It is the case of the hare and the tortoise, or of genius and common sense. The man of science can win if he takes the trouble, and does not despise the means. Skill in diagnosis is like a telescope to a rifleman, and if the man who has it is not so good a therapeutist as he who has it not, it is his own fault.

But besides showing the fact that practical therapeutics is neglected or despised by some men of high scientific attainments, we desire to show that the very mode in which the subject of the administration of remedies is approached by many of our brethren, and the maxims laid down, are not only not true, but are contrary to the truth and subversive of it; and that one of the greatest obstacles to the progress of rational therapeutics, is the style of philosophising often adopted with respect to it.

It seems to be forgotten that, from the very nature of the subject, all *à priori* reasoning is out of place in therapeutics as it is in dietetics, cookery, and even in the simpler processes of inorganic chemistry. There is no reaction of any one chemical substance with another which we can conceive of as a necessity, or of which the contrary might not *à priori* be equally probable. Baryta might have yielded a soluble sulphate, and magnesia an insoluble one; the flame of soda might have been red instead of yellow for anything we know. The only rest we can find for the soles of our feet when we wander into speculations why arsenic is poisonous, alum innocent, why CO_2 should give a pleasant pungency to our table-beer, and C_2O_3 be a virulent corrosive poison is, that the Almighty has willed it, with some good purpose unknown to us. We may collect results of chemical reactions, classify them, and account for them to a certain extent when we know what they are; but we cannot predict them, nor show their necessity. But the human body in health, and still more in disease, is the theatre of innumerable chemical processes. The behaviour of it (as chemists say), when subjected to the intervention of different re-agents, is a thing which may be known by experiment, but which is as impossible to foretell by reasoning (except in some instances by analogy) as are the reactions of the last new metal—cæsium. The only basis of therapeutic knowledge, then, is experiment. Reason leads us to devise experiments; but not to foretell the results absolutely. It is experiment which is the true basis of therapeutics; or, in other words, that art is *par excellence* an empirical art. When this truth is received and acted on, therapeutical experiment adds largely to our means of allaying suffering, and equally so to our knowledge of absolute facts respecting the properties of the animal economy. When this truth is ignored, or when men affecting to be *rational* despise the word "empirical," and set to work to spin out of their brain that which they ought to get from the use of their eyes and fingers, then confusion and loss of life ensue, barely compensated by the pompous and self-satisfied phraseology in which the rationalist indulges.

Let us take the example of one of the last remedies that has been brought into popular use—the chlorate of potass. We meet Mr. A., who says he is giving it in a case of stomatitis. Why? "Because," says Mr. A., "Mr. Thomas Hunt some years ago, and Mr. Jonathan Hutchinson afterwards, affirmed that they found it of great service in that disease; my neighbour B. found it to do good; I tried it in one case with benefit, and therefore I give it in another." This is solid, unimpeachable argument; thoroughly rational, because reason rightly used shows that experiment is the only mode of obtaining information in any such case. Not so Mr. C. He says: "I boast of being a scientific and rational practitioner, and I scorn to administer any remedy of which I cannot give a correct *rationale*. I consider that my patient's blood is insufficiently oxygenated, and that some protein compounds in a state of imperfect retrograde metamorphosis are deposited in the mucous membrane; I seek a remedy which shall impart oxygen; chlorate of potass, with its six equivalents (KO,ClO_5), is such a remedy; it imparts its oxygen to the blood, the sore mouth gets well, my patient's health is restored, and my intellect is gratified by using a remedy, not a blind empirical one suited to the dark ages, but one of which reason can trace the *modus operandi* at every stage." But Mr. Experimentalist most obstinately interrupts this self-complacent gratulation, by asking, "How do you know that chlorate of potass parts with its oxygen to the blood? The chlorate (and the nitrate) when ignited at a high temperature, oxidise organic matter readily enough; but can you show that this takes place in the blood, or that, if it did, the oxidation would fall where you wish it, and not upon some healthy elements? Does not the chlorate, like the nitrate, pass out undecomposed in the urine? The chlorate of potass administered in doses of 15 grains every six hours, would introduce 24 grains of oxygen into the blood per diem; whereas a healthy adult man is reckoned to take daily 11,500 grains of oxygen, a quantity sufficient to convert 4310 grains of carbon into carbonic acid. But the patient, probably, has no appetite, and takes little or no food all the while that he is breathing as quickly as ever, or more so. Certainly he is rapidly wasting, and wasting, as I believe, argues oxidation. So that my reason does not lead me to believe that an oxidating agent *simpliciter* is required. Therefore, as to your *fact* that chlorate of potass cures a sore mouth, I take it provisionally as a fact, on your authority, and shall try whether my own experiments give the same result as yours. But as for believing that its virtues depend on its mite of oxygen, let me say that you have not proved this part of the case, nor rendered it probable; but whether proved or not, this will not in the least affect the empirical fact (if it be one) that chlorate of potass cures a sore mouth, which is the one (possible) grain of wheat in a bushel of chaff. This fact (if it be a fact) is valuable, though the arguments which led to the discovery may be good for nothing."

We must resume in a future number a history of the way in which the substitution of argument for experiment has impeded the progress of Therapeutics.

THE WEEK.

We have but just time to make known the result of the Elections on Thursday at the College of Surgeons. There was a little discrepancy as to a vote or two between the accounts of the two Vice-Presidents, but we believe the following to be the correct return :—

Mr. Solly	153
Mr. Fergusson . . .	121
Mr. Macmurdo . . .	107
Mr. Bishop	102
Mr. Paget	99
Mr. Adams	74

The first three gentlemen were declared duly elected ; and, while regretting that the assertion of a principle has led to the retirement of so estimable and popular a gentleman as Mr. Bishop, it must be a subject of general satisfaction that the old system has been broken through, and that a Surgeon so eminent as Mr. Fergusson now sits in the College Council.

Charles Lamb once said, that when a man was bitten by a dog, the proper thing was to shoot the man, and carefully lock up the dog and watch him to see whether there was anything the matter with him. The fate of the landlord of the Red Cow Tavern, Park-place, Mile-end-road, tragic as it is, has its ludicrous aspects when considered as an evidence of popular misapprehension. A gentleman entered his house on the 17th ult., with a large mastiff, which the landlord was admiring and patting on the head, when it suddenly snapped at him, and bit him on the inner side of the left arm. Not long after, the poor man is said to have become very violent, and shown a dislike of water. He barked like a dog several times, and imitated the crowing of a cock. He spoke in a very incoherent manner, said that Blondin was going through his feats, and that his room was wet and infested with various kinds of fish. *He seemed to be much better when informed that the dog had been killed!* Nevertheless, excitement soon came back with greater violence, insomuch that "it was necessary to have three or four persons to hold him down ;" therefore a "keeper" and strait-waistcoat were sent for, but the man died before it could be put on. This was evidently not a case of hydrophobia, but of delirium tremens, brought on by fright, in a patient of highly nervous temperament. Dr. Edmunds, of Spital-square, one of the witnesses, commented upon the foolish notion that when anyone had been bitten, he would become more secure by destroying the dog, and showed that if the dog could have been preserved alive and in health, all fear might have been dissipated. The popular notion, however, is firmly rooted, that if an animal who bites a man ever becomes mad afterwards, the man bitten will do so too. This proposition may agree with some old discarded doctrines about sympathy, but not with modern physiology.

The proposed amalgamation of the Royal Medical and Chirurgical Society having been opposed by the Pathological and Obstetrical, although it was supported by the Epidemiological, a number of influential Fellows of the Medico-Chirurgical have signed a memorial urging their Council to consider the expediency of carrying out the propositions recently discussed "by Sections of the Society selected for that purpose." In other words, that the Medico-Chirurgical Society should appoint from among their own Fellows special Committees to investigate and report upon important Professional questions, somewhat similar to the proceeding of the French Academy. The memorial includes the names of Mr. Arnott, Dr. Robert Lee, Dr. Webster, and Mr. Macilwain, who spoke against amalgamation, and Dr. Stewart, Dr. Meryon, and others who spoke in its favour ; so that, as both parties are in favour of the proposed innovation, we are glad to hear that the Council have already appointed a Sub-Committee to consider the whole question.

Scarcely have the changes at St. George's consequent upon the retirement of Mr. C. Hawkins and Mr. Cutler been completed, when Mr. Stanley retires from the Surgeoncy of St. Bartholomew's, which he has filled with so much credit to himself and such great advantage to the Profession. Mr. Stanley retired on Thursday, and Mr. Paget succeeds to the Surgeoncy. The whole Profession will join with us in congratulating him upon attaining the honour for which he has worked so well and so long.

Amongst the *opprobria* of the age is the wholesale destruction of young infants through the criminal carelessness and neglect, if not the actual murderous practices of their parents ; and amongst the *opprobria medicorum* is the difficulty of discriminating between the various forms of wilful and accidental suffocation. A sullen-looking, married woman was brought to the Clerkenwell Police-court the other day on the charge of attempting to murder her infant by thrusting a piece of linen into its throat. Had the wretch's attempt succeeded, we probably should have heard of the death as a case of "suffocation whilst in bed with its parents," or "death from causes unknown."

The helplessness of the Fire Brigade at the recent great fire in Southwark, and the palpable fact that London was saved from a destruction of shipping, houses, and property scarce inferior to that in 1666 by a providential lull of the wind, and not by any human efforts, has naturally directed public attention to the existing means for putting out fires, and the expediency of improving them. With regard to the engines and their men, they belong to a multitude of owners, and they are deficient in number and uniformity of discipline. But, even were they more numerous, we seem to want other means for dealing with such huge masses of combustible matters as are contained in the riverside wharfs and warehouses. Fire can be extinguished by two methods : first of all, the oxygen and the combustible substance may be kept apart, as in the common mode of putting out a candle by an extinguisher ; or it may be extinguished by cooling the combustible matter down to below the point at which chemical union with oxygen is possible. This is done when flame is made to pass through wire-gauze, as in the common safety-lamp. This second process is essential to the permanent extinction of fire, because it is of no use to cut off the atmospheric air if the combustible is so hot that it will begin to ignite afresh when the access of air is restored. This is what happened with goods that were laid up in vaults under St. Paul's at the time of the Great Fire in 1666—when the vaults were opened some time afterwards, the goods burst out into flames. It is easy to blow out a candle, *i.e.*, displace the incandescent gases, and cool the wick, so that the gas next evolved shall be below the temperature of ignition ; but it is not so easy to blow out a larger flame. Water acts in both ways : it cuts off the atmospheric air, and it cools down the burning mass ; but in such a fire as that of Southwark, the water may be converted into steam by the great heat long ere it can fall on the burning surface. Certainly the inventors of fire annihilators have a clear field before them, if they can devise some means of smothering large fires. Some chemical experiments are said to have been conducted by Mr. Warrington, but without the slightest avail.

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

MINUTES OF MEETING, THURSDAY, JUNE 27, 1861.

Royal College of Physicians, London.

Mr. GREEN, *President*, took the chair at two o'clock p.m.

Present—

Dr. Burrows.	Dr. A. Thomson.
Mr. Arnott.	Dr. A. Smith.
Mr. Nussey.	Mr. Hargrave.
Dr. Acland.	Dr. Leet.
Dr. Bond.	Dr. Apjohn.
Dr. Embleton.	Dr. Corrigan.
Dr. Storrar.	Dr. Sharpey.
Dr. Alexander Wood.	Sir Charles Hastings.
Dr. Andrew Wood.	Mr. Lawrence.
Mr. Watt.	Mr. Teale.
Mr. Syme.	Dr. Stokes.

Dr. Francis Hawkins, Registrar.

The Minutes of the last meeting were read and confirmed.

A letter was read from Dr. Christison, expressing his great regret that he was unable, through indisposition, to attend the meeting of the General Council.

The following official notices were read:—

1. That the Royal College of Surgeons of England had chosen and appointed James Monerieff Arnott, Esquire, to be a member of the General Medical Council.

2. That Her Majesty had been pleased, by and with the advice of her Privy Council, to appoint William Sharpey, Esquire, M.D., to be a member of the General Medical Council.

3. That the President and Council of the Royal College of Surgeons in Ireland had elected William Hargrave, Esquire, as a member of the General Medical Council.

Mr. Arnott was then introduced to the meeting by Mr. Lawrence; Dr. Sharpey by Dr. Storrar; and Mr. Hargrave, M.B., by Dr. Corrigan.

Resolved,—That the Business Committee of last year, consisting of the following members, be re-appointed, viz.:—Dr. Andrew Wood, *Chairman;* Mr. Teale, Dr. Embleton, Dr. Thomson, Dr. Corrigan.

That the Committee on Special Claims for Registration be re-appointed, consisting of the following members:—Dr. Alexander Wood, *Chairman;* Sir Charles Hastings, Dr. Bond, Mr. Syme, Dr. Leet, Dr. Embleton, Dr. A. Smith.

That the Committee on Amendment of the Medical Acts be re-appointed, and consist of the following members:—Dr. Corrigan, *Chairman;* Dr. Thomson, Dr. Storrar, Dr. Apjohn, Dr. Burrows, Dr. Acland, Dr. Andrew Wood, Dr. Sharpey, Mr. Hargrave.

1. Moved by Dr. STORRAR, seconded by Mr. TEALE—That the Education Committee be re-appointed, and that it consist of all the members of the Council.

Amendment moved by Dr. ALEXANDER WOOD, seconded by Mr. SYME—That all questions relating to education be discussed at the regular meetings of the Council.—Amendment negatived; original motion carried.

2. Moved by Dr. ALEXANDER WOOD, seconded by Dr. STORRAR—That a Finance Committee be appointed, consisting of Dr. Burrows, *Chairman;* Dr. A. Smith, Dr. Andrew Wood, Mr. Arnott.—Agreed to.

3. Moved by Dr. ALEXANDER WOOD, seconded by Mr. SYME—That it is the opinion of this Council, that before Mr. Kearney be summoned to appear, the Council should have an opportunity of ascertaining the nature of the charges against him, and the evidence by which they can be supported.—Agreed to.

4. Moved by Dr. ANDREW WOOD, seconded by Dr. APJOHN—That the Council proceed to consider the report of the Committee on the mode of conducting the business of the Council, which was received by the General Council on June 23, 1860, but was not then taken into consideration, from want of time.—Agreed to.

The resolutions of the Report, Nos. 1, 2, 3, and 4, were adopted, viz:—

"1. That the General Council shall meet each day at 2 p.m., and shall not sit after 6 p.m.

"2. That the proceedings of the Council shall be recorded by the Registrar in writing, in a book to be kept for that purpose.

"3. That the Minutes of each meeting of the Council, as well as all notices of motions, shall be printed, and transmitted to each Member of the Council.

"4. That the Minutes of the several meetings of the Council shall contain simply such resolutions and amendments as have been proposed and adopted, or negatived, with the names of the proposer and seconder, and without any comment or observation of Members annexed."

5. Moved by Dr. A. SMITH, seconded by Mr. TEALE—That No. 5 be amended as follows: That, previously to any Session or special meeting of the General Council, the Registrar prepare a programme of business, and furnish two copies to each Member of the Council, not less than three days before the day of meeting.—Agreed to.

No. 6 was adopted, viz.:—That any motion or motions lying over from the previous day take precedence of new matters, except by special permission of the Council.

6. Moved by Dr. ANDREW WOOD, seconded by Dr. APJOHN—No. 7. That during the sitting of the General Council a programme of subjects to be brought forward, and of notices of motions which have been given by Members of the General Medical Council, be prepared by the Registrar, be printed, and distributed by him from day to day, as may be required, and that a Committee be annually appointed, to aid the Registrar in this matter.—Agreed to.

The 7th resolution of the Report was adopted, viz.:—No. 8. That in all cases where a division has taken place, any Member of the Council may require that the names of the majority and minority shall be entered on the minutes.

The 8th resolution of the Report was not adopted.

The 9th resolution was amended, and adopted as follows:—No. 9. That whenever a Branch Council shall refer to the General Council the name of any person which it is deemed desirable to remove from the Register, the Registrar of the General Council shall, if directed by the President, obtain the opinion of counsel on the facts and bearings of the case, before it is submitted to the General Council; and that such opinion of counsel shall accompany the statement of the case when it is brought before the General Council.

The following resolutions were adopted:—

a. No motion or amendment shall be withdrawn, after being put from the chair, except by leave of the meeting.

b. Any number of amendments may be moved.

c. If there is but one amendment, the amendment shall be the first question put to the vote; and in any case where a motion and more than one amendment shall be before a meeting of the Council, the first question put to the vote shall be "That the original motion be amended."

d. In the case of there being but one amendment, if such amendment be lost, or, if in the case of there being several, it be carried that the original motion be not amended, the original motion shall then be put to the vote.

Resolution *e* was amended, and adopted as follows:—

e. If it be carried that the original motion be amended, the amendments shall be put to the vote in the inverse order in which they shall have been moved.

Resolution *f* was adopted, viz.:—

f. No discussion, and no amendment shall be allowed after the first question has been put to the vote.

7. Moved by Dr. STORRAR, seconded by Dr. CORRIGAN—That all amendments shall be so framed, that they may read as independent motions.—Agreed to.

Confirmed—JOSEPH HENRY GREEN.

MINUTES OF MEETING, FRIDAY, JUNE 28, 1861.

Mr. GREEN, *President*, took the chair at two o'clock p.m.

Present—

Dr. Burrows.	Dr. A. Thomson.
Mr. Nussey.	Dr. A. Smith.
Dr. Acland.	Mr. Hargrave.
Dr. Bond.	Dr. Leet.
Dr. Embleton.	Dr. Apjohn.
Dr. Storrar.	Dr. Corrigan.
Dr. Alexander Wood.	Dr. Sharpey.
Dr. Andrew Wood.	Sir Charles Hastings.
Mr. Watt.	Mr. Teale.
Mr Syme.	Dr. Stokes.

Dr. Francis Hawkins, *Registrar*

The Minutes of the last meeting were read and confirmed.

1. Moved by Mr. TEALE, seconded by Dr. APJOHN—That the President be *ex officio* a member of all Committees.—Agreed to.

2. Moved by Dr. STORRAR, seconded by Dr. CORRIGAN—That the Roll shall be called on the President's taking the chair, and that any Member not present before the Minutes of the previous day are confirmed, shall be deemed absent.—Agreed to.

3. Moved by Dr. ALEXANDER WOOD, seconded by Dr. BURROWS—That no member, after taking his place, shall leave the meeting without the permission of the Chairman.—Agreed to.

4. Moved by Dr. ANDREW WOOD, seconded by Dr. ALEXANDER WOOD—That Reporters for the Press be admitted to the meetings of the General Council.—Negatived.

Dr. ANDREW WOOD required that the names of the majority and minority should be entered on the Minutes.

Majority—Dr. Burrows, Dr. Acland, Dr. Bond, Dr. Embleton, Dr. Storrar, Mr. Watt, Mr. Syme, Dr. Thomson, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Sir Charles Hastings, Dr. Sharpey, Mr. Teale, Dr. Stokes. Minority—Dr. Alexander Wood, Dr. Andrew Wood.

Read, the following letter, relative to the case of Richard Organ:—

"66, Lincoln's Inn Fields, London, W.C.,
"January 21, 1861.

"SIR,—We have the honour to inform you, for the information of the General Medical Council, that the Court of Queen's Bench has this day discharged, with costs, the Rule obtained by Richard Organ for a *mandamus* to restore his name to the Register. The Court held that the Medical Council were justified in striking his name off, both under the 26 Sec., and the 29th.

"We are, Sir,
"Your faithful and obedient Servants,
"Farrer, Ouvry and Farrer.
"Francis Hawkins, Esq., M.D.,
"Medical Registration Office, Soho-square, W."

Communications were read, conveying the thanks of the Selby Medical Registration Association, and of the York Medico-Ethical Association, to the Medical Council, for their conduct in the case of Richard Organ.

5. Moved by Dr. ANDREW WOOD, seconded by Dr. EMBLETON—That the letter from the Selby Medical Registration Association, dated 13th February, 1861, and the Resolutions of the York Medico-Ethical Association, dated 1st March, 1861, be entered on the Minutes,—Negatived.

6. Moved by Dr. ALEXANDER WOOD, seconded by Dr. STORRAR, and agreed to—That a letter from the Secretary of the Selby Medical Registration Association, dated March 20, 1861, having been read, it be referred to a Committee, and that the Committee be empowered to take a legal opinion on the matter contained in it, if they should deem it expedient.

The Committee to consist of Dr. Alexander Wood, *Chairman;* Dr. Storrar, Dr. Sharpey, and Mr. Watt.

7. Moved by Dr. STORRAR, seconded by Sir CHARLES HASTINGS, and agreed to—That the Registrar be instructed to communicate with Dr. Garrod, and to request that he will be kind enough, as Secretary of the Pharmacopœia Committee, to inform the Council as to what progress has been made in the preparation of the Pharmacopœia, and when there is a probability of its being completed.

8. Moved by Dr. ANDREW WOO, seconded by Mr. HARGRAVE, and agreed to—That the Medical Acts Amendment Committee of the Council be authorised to receive, on Monday, July 1st, at twelve o'clock, a Deputation from the National Medical Registration Association, who have requested an interview on the subject of the Amendment of the Medical Acts.

A Memorial from Practitioners at Shrewsbury, respecting the 40th Section of the Medical Act, was referred to the Medical Acts Amendment Committee.

Confirmed—JOSEPH HENRY GREEN.

MINUTES OF MEETING, SATURDAY, JUNE 29, 1861.

Mr. GREEN, *President*, took the chair at two o'clock p.m.

Present—

Dr. Burrows.	Dr. A. Thomson.
Mr. Arnott.	Dr. A. Smith.
Mr. Nussey.	Mr. Hargrave.
Dr. Acland.	Dr. Leet.
Dr. Bond.	Dr. Apjohn.
Dr. Embleton.	Dr. Corrigan.
Dr. Storrar.	Dr. Sharpey.
Dr. Alexander Wood.	Sir Charles Hastings.
Dr. Andrew Wood.	Mr. Lawrence.
Mr. Watt.	Mr. Teale.
Mr. Syme.	Dr. Stokes.

Dr. Francis Hawkins, Registrar.

The Minutes of the last meeting were read and confirmed.

Read, Reference from the Irish Branch Council (See Minutes of Irish Branch Council, No. 37, p. 5), in regard to the case of Mr. John Kearney, of Carndonagh, County Donegal.

1. Moved by Dr. A. SMITH, seconded by Dr. CORRIGAN—That the case of Mr. John Kearney, of Cardonagh, be now taken into consideration.—Agreed to.

2. Moved by Dr. A. SMITH, seconded by Dr. CORRIGAN—That Mr. Ouvry, Solicitor of the Council, be introduced, in order to state the particulars of the case against Mr. John Kearney.—Agreed to.

3. Moved by Dr. CORRIGAN, seconded by Mr. HARGRAVE—That the diploma represented by Mr. John Kearney, of Carndonagh, to have been granted to him by the University of Glasgow on March 1, 1836, be produced.

Dr. Thomson handed in the diploma, which he had received from the Clerk of Senate of the University of Glasgow.

4. Moved by Dr. CORRIGAN, seconded by Dr. A. SMITH—That, Mr. Ouvry's statement of the case against Mr. John Kearney having been heard, the further consideration of the case be postponed to Monday, at 2 o'clock, in order to allow full time for the attendance of Mr. Kearney, or for any communication from him.—Agreed to.

5. Moved by Dr. CORRIGAN, seconded by Dr. A. SMITH—That the following correspondence in reference to the case of Mr. W. J. McNiece be inserted in the Minutes.—Agreed to.

"Milton, Halton County, Canada West, July 2, 1860.

"Dear Sir,—I wish you would bring the following under the notice of the Medical Council, and ask if they can take any action in the matter. I am registered No. 730 in your Register, from Five-mile Town, Ireland. I expected, on my arrival here, that the clause 31 of the Medical Act would have enabled me to at once commence practice here; but no, there is a Provincial Act, which requires all Medical Practitioners to have the Governor-General's Licence, and this is only granted to old country Practitioners, that come with a degree in Medicine or Surgery from a University. 'Tis true the London College of Surgeons have established a right for their Licentiates, by proving that their Charter, granting certain privileges to their College, was anterior to the Act granting Canada a Parliament; but the Fellows and Licentiates of the Colleges of Surgeons of Dublin, Edinburgh, or of the Faculty of Physicians and Surgeons, Glasgow, are ignored, and will receive the Governor-General's Licence only by passing a fresh examination before one of the Medical Boards of this country. The Licentiates of the Dublin or Edinburgh College of Physicians are specially excepted. Believing that, if the Council take action in this matter, and procure the proper authorities to communicate with his Excellency the Governor-General, the matter will be remedied,

"I am, dear Sir, yours faithfully,
"William J. McNiece,
"Lic. Fac. Phys. & Surg. Glasg.,
"Lic. Apoth. Hall, Ireland.
"H. Maunsell, Esq., Medical Registrar, Dublin."

"Medical Registration Office,
"32, Soho-square, London, W.
"August 31, 1860.

"My Lord Duke,—I take the liberty of addressing you, in consequence of representations made to me by the College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, in behalf of Mr. William J. McNiece, who was registered as Lic. Fac. Physicians and Surgeons, Glasgow, and Lic. Apothecaries' Hall, Dublin, 1849, and is now settled in Canada West. I enclose a copy of his letter, from which it appears that he has been refused a Licence to

practise there, unless he submits to an examination before one of the Medical Boards of that country.

"If your Grace would be pleased to refer to the Medical Act of 1858, you will find that the Provincial Statute, upon which the refusal is founded, is irreconcileable with the abovementioned Act of the Imperial Legislature, the 31st Section of which provides, that 'Every person registered under this Act shall be entitled, according to his qualification or qualifications, to practise Medicine or Surgery, or Medicine and Surgery, as the case may be, in any part of Her Majesty's dominions.'

"I venture therefore to solicit the attention of your Grace to the Statute in question of the Provincial Legislature, which is calculated at once to defeat the intentions of the Imperial Parliament, and to inflict an illegal prohibition on the practice, Medical and Surgical, of those who have been duly Registered in this country. And I submit the case for your Grace's favourable consideration with the greater confidence, because upon a similar application (the nature of which will appear from the accompaning copy of a letter from the Colonial Office) you were pleased to express your intention of calling upon the Colonial Legislature of Jamaica to amend an Act having a similar object, as repugnant to the English statute.

"I have the honour to remain,
"My Lord Duke,
"Your Grace's obedient Servant,
"Joseph Henry Green,
"President of the General Council of Medical
"Education and Registration.
"His Grace the Duke of Newcastle," &c.

"Downing-street, September 12, 1860.

"Sir,—I am directed by the Secretary of State to acknowledge the receipt of your letter of the 31st ultimo, and to acquaint you that a copy of it has been transmitted to the Governor of Canada, with instructions to report upon the subject to which it relates.

"I am, Sir, your obedient Servant,
"C. Fortescue.

"Joseph H. Green, Esq.,
"President of the General Medical Council, London."

The Registrar stated that he had written to the Under-Secretary of State for the Colonies to inquire whether any report had been received from the Governor of Canada on the subject of the President's Letter, but had as yet received no answer to his inquiry.

Dr. Alexander Wood brought up the Report of the Committee on Special Claims for Registration.

REPORT.

The Committee on Special Claims for Registration have to report that four claims for Registration under special circumstances have been brought before them.

1. Claims by two Surgeons in the Royal Navy for Registration. Charles William White and John Patchell having produced to the Registrar evidence of having passed their examinations as Surgeons in the Royal Navy, and this evidence having been submitted to the Committee, they beg to recommend them for Registration, under Clause 46 of the Medical Act.

2. Alfred John Powell, of 15, Alfred-place, Southwark, petitions to be allowed to register a Degree in Medicine, obtained, after examination, at Erlangen, in September, 1860.

By Clause 46 of the Medical Act, Graduates of Foreign Universities, claiming to be registered, must have been practising on these foreign diplomas *before* the passing of the Act, or, by Sect. 11 of Schedule (A), must have been practising as Physicians in the United Kingdom before the 1st day of October, 1858. The Council have therefore (as Mr. Powell has already been informed by the Registrar) no power to order the registration of his Degree.

3. Frederic Harvey, a Staff-Surgeon in the Navy, and a member of the Royal College of Surgeons of England, petitions to be allowed to Register a Diploma in Medicine, obtained from the University of Malta on April 23, 1836, after examination.

The Committee beg to recommend that the Registrar be instructed to enter in the Register Mr. Harvey's diploma in Medicine from the University of Malta.

6. Moved by Dr. Alexander Wood, seconded by Sir Charles Hastings—That Charles William White be registered as a Surgeon in the Navy.—Agreed to.

7. Moved by Dr. Alexander Wood, seconded by Dr. Sharpey—That John Patchell be registered as a Surgeon in the Navy.—Agreed to.

8. Moved by Dr. Alexander Wood, seconded by Dr. Sharpey—That the degree of Alfred John Powell be not registered.—Agreed to.

9. Moved by Dr. Alexander Wood, seconded by Dr. Leet—That the Diploma in Medicine of Frederic Harvey be registered.—Agreed to.

10. Moved by Dr. Storrar, seconded by Dr. Acland—That the President be requested to act as Chairman of the Education Committee.—Agreed to.

11. Moved by Dr. Stokes, seconded by Dr. Andrew Wood—That the Council do now resolve itself into a Committee on Education.—Agreed to.

MINUTES OF THE GENERAL COMMITTEE ON EDUCATION.

The *President* took the chair.

Read, the Report of the General Committee on Education, adopted by the Council in 1860.

Read, the Report of the Sub-Committee on the Visitation of Examinations.

1. Moved by Dr. Andrew Wood, seconded by Dr. Storrar.—That the Education Committee proceed to consider the Report of the Sub-Committee on the Visitation of Examinations, submitted to the Council on June 23, 1860, the consideration of which was deferred till the present Session.—Agreed to.

2. Moved by Dr. Alexander Wood, and seconded by Dr. Storrar.—That, as Clause 18 of the Medical Act leaves to the Council the alternative of fulfilling the important duty of visitation of the examinations of the various licensing bodies either personally or by deputy, it is the opinion of the Education Committee that this important duty would be more efficiently and satisfactorily accomplished by Inspectors nominated by the Council.

The first amendment was moved by Dr. Corrigan, and seconded by Mr. Lawrence—That it does not appear expedient, at present, to take any steps in regard to Visitations of Examinations of the various Qualifying Bodies.—Carried.

The second amendment was moved by Dr. Andrew Wood, and seconded by Mr. Watt—That it is expedient that the Medical Council should exercise the power conferred upon them by Clause 18 of the Medical Act, to institute a system of Visitation of the Examinations of the different Bodies comprised in Schedule (A.)—Negatived.

The third amendment was moved by Mr. Arnott, and seconded by Dr. Embleton—That the consideration of the question of the Visitation of the various Examining Bodies mentioned in Schedule (A) be deferred.—Negatived.

Question put to the vote and carried—That the original Motion be Amended.

Confirmed—Joseph Henry Green.

MINUTES OF MEETING, MONDAY, JULY 1, 1861.

(*Present*—as before.)

The Minutes of the last meeting were read and confirmed.

The consideration of the case against Mr. John Kearney, of Carndonagh, was resumed.

1. Moved by Dr. A. Smith, seconded by Dr. Corrigan—That Mr. Ouvry, the Solicitor of the Council, be requested to attend.—Agreed to.

The Registrar then stated that no communication had been received since the last meeting of the Council, from Mr. John Kearney, of Carndonagh.

2. Moved by Dr. A. Smith, seconded by Dr. Corrigan—That John Kearney, of Carndonagh, Co. Donegal, Ireland, is judged by this Council, after due inquiry, to have been guilty of infamous conduct in a professional respect.—Agreed to.

3. Moved by Dr. A. Smith, seconded by Dr. Corrigan—That John Kearney, of Carndonagh, Co. Donegal, Ireland, having been judged by the General Council, after due inquiry, to have been guilty of infamous conduct in a professional respect, the General Council do hereby adjudge that the name of the said John Kearney be erased from the Register, and do by this order direct the Registrar to erase his name from the Register accordingly.—Agreed to.

4. Moved by Dr. A. Smith, seconded by Dr. Corrigan—That a copy of this order, signed by the President in the

chair, and countersigned by the Registrar, be transmitted to John Kearney.—Agreed to.

The diploma, which had been handed in, was returned to Dr. Thomson, to be restored to the Clerk of Senate of the University of Glasgow.

5. Moved by Dr. Alexander Wood, seconded by Dr. Burrows—That a Committee be appointed to prepare regulations for the conduct of any proceedings which may be taken under the 26th and 29th Sections of the Medical Act; and that the Committee be authorised to obtain the assistance of the solicitors in the preparation of these regulations.—Agreed to.

The Committee to consist of—Dr. Alexander Wood, *Chairman;* Dr. Burrows, Dr. Storrar, Dr. Thomson, Mr. Teale, Dr. Stokes, Dr. Embleton, Dr. Apjohn.

Dr. Alexander Wood brought up the following Report of the Committee on the Letter from the Secretary of the Selby Medical Registration Association :—

"The Committee to which the letter of Mr. Burkitt, Secretary to the Selby Medical Association, was referred, reports that, without venturing to discuss the extent of power vested in the Council by the Medical Act, it would in its opinion be hopeless for the Council to proceed in the manner suggested upon the evidence furnished."

6. Moved by Dr. Storrar, seconded by Dr. Alexander Wood—That the Report now read be adopted, and entered upon the minutes.—Agreed to.

The Council resolved itself into a Committee on Education.

The General Council having resumed its sitting :—

7. Moved by Dr. Corrigan, seconded by Mr. Syme—That, having reference to the communication from the Poor-Law Board of England, of August 5, 1859; the reply, of August 10, 1859; and the communication from the Poor-Law Board, of December 15, 1859, the Committee in reference to such communications be reappointed, with the substitution of the name of Mr. Syme for that of Dr. James Watson, and the addition of that of Dr. Sharpey.—Agreed to.

The Committee to consist of—Dr. Corrigan, *Chairman;* Mr. Syme, Dr. Apjohn, Dr. Sharpey, Sir Charles Hastings.

It having been officially certified to the Council, that Daniel de la Cherois Gourley had, on September 17, 1860, been convicted at the Central Criminal Court, London, of a misdemeanor—

8. Moved by Dr. Burrows, seconded by Dr. Sharpey—That, in pursuance of Sect. 29 of the Medical Act, the Council do direct the Registrar to erase the name of Daniel de la Cherois Gourley from the Register.—Agreed to.

Confirmed—Joseph Henry Green.

MINUTES OF MEETING, TUESDAY, JULY 2, 1861.

(*Present*—as before.)

The Minutes of the last meeting were read and confirmed.

A petition was read from John Valentine Laverick, that his Licence, obtained from the Faculty of Physicians and Surgeons of Glasgow, February 12, 1861, and his Licence, obtained from the Royal College of Physicians, Edinburgh, April 19, 1861, be entered in the Medical Register.

1. Moved by Dr. Alexander Wood, and seconded by Mr. Watt—That the Registrar be authorised to register the name and qualifications of John Valentine Laverick.

Amendment moved by Dr. Storrar, and seconded by Dr. Acland—That John Valentine Laverick, having applied to the Council to have his qualifications as Licentiate of the College of Physicians of Edinburgh, and Licentiate of the Faculty of Physicians and Surgeons of Glasgow, re-inserted in the Register, and his application having been approved of and supported by the representatives of the Edinburgh College of Physicians, and the Glasgow Faculty of Physicians and Surgeons, the said application be complied with.—Amendment carried.

A communication was read from Dr. Douglas Maclagan, President of the Royal College of Surgeons of Edinburgh, informing the Council that Dr. Hugh Brown had been struck off the List of Licentiates of that College, on the ground that his Diploma had been obtained in 1856 by a false statement of his age.

2. Moved by Dr. Andrew Wood, seconded by Dr. Storrar—That in respect that the name of Dr. Hugh Brown has been struck off the List of Licentiates of the Royal College of Surgeons of Edinburgh, his Qualification of Licentiate of the Royal College of Surgeons of Edinburgh be erased from the Medical Register.—Agreed to.

A communication was read from the Council of the Faculty of Physicians and Surgeons of Glasgow, informing the Medical Council that Daniel Dougal had been struck off the List of Licentiates of the Faculty of Physicians and Surgeons of Glasgow on June 25, 1861, in consequence of his having made a false declaration of his age.

3. Moved by Mr. Watt, seconded by Sir Charles Hastings—That in respect that the name of Daniel Dougal has been struck off the List of Licentiates of the Faculty of Physicians and Surgeons of Glasgow, his Qualification of Licentiate of the Faculty be erased from the Medical Register.—Agreed to.

4. Moved by Dr. Andrew Wood, seconded by Dr. Embleton—That the Council resolve itself into a Committee on Education.—Agreed to.

REVIEWS.

A Manual of Minor Surgery and Bandaging, for the Use of House-Surgeons, Dressers, and Junior Practitioners. By Christopher Heath, F.R.C.S. 8vo. London: 1861.

It is long since a work of this nature has been published, in fact, we may say that this is the first of its kind—for although the *vade mecum* of Cutler is well known, it referred in a great measure to bandaging, etc. Mr. Heath has addressed his observations mainly to that numerous and important body of young men, the House-Surgeons and Dressers of the Hospitals, and we feel sure that these gentlemen will be grateful to the author for having produced a book which will be of material assistance to each one of them in the daily discharge of their multifarious and frequently perplexing duties.

Mr. Heath writes like a well informed and sensible Surgeon, without pedantry or affectation, and consequently he has given in a small space a very large amount of information on most points connected with minor surgery, and with those manipulative proceedings which form the daily routine of those engaged in the treatment of the ordinary surgical emergencies—from the most simple to the most formidable.

The introductory remarks respecting the duties of a House-Surgeon, should be read by every one who is fulfilling, or about to undertake, that office, and he will do well to make himself acquainted with the rules laid down in the fifth chapter, regarding the various details connected with the preparation of patients for operations and the treatment after operations. It is a subject of frequent remark that there is a great difference between one Hospital and another, with respect to the manner in which the operations are conducted. In one establishment the visitor is struck with the want of care which is observable in the whole proceedings, whilst in another he finds the various details connected with the necessary duties of the operating theatre so admirably, yet so quietly, carried out, that all is order and discipline, and there is nothing to pain or shock the most sensitive mind, although the tone observable in the operating theatre is doubtless in a great measure imparted by the character and conduct of the Surgeons themselves,—it is impossible that there can be that order and neatness alluded to, without the co-operation of a House-Surgeon thoroughly competent and anxious to assist his chief by attending to the many little details which the latter cannot see to himself.

One of the most frequent causes of vexation to the attendant and suffering to the patient, is the occurrence of bed sores. Mr. Heath is quite alive to the importance of preventing them :—

"Of all the annoying complications of surgical cases, bed sores are the worst. The greatest care must be taken to prevent their formation, since if the skin is once broken, it is a matter of the greatest difficulty to induce it to heal again so long as the patient occupies the recumbent position. The slightest tenderness over the sacrum or hips should receive, therefore, immediate attention and various applications have been suggested for the relief of the complaint. Equal parts of olive oil and brandy, gently rubbed with the palm of the hand over the tender spot for five minutes twice a-day will be found efficacious in rendering the skin tough and less sensitive to pressure. Collodion painted over the part is a

useful application, and some Surgeons prefer to cover the tender spot with amadou plaster, so as to form a cushion over it. A water pillow under the pelvis of the patient forms a most valuable addition to either of the above modes of treatment, and an old or emaciated patient, whom it will be necessary to keep in the recumbent position for any length of time should be furnished with a water pillow from the first, so that all risk may be avoided."—P. 97.

One of the most frequent surgical emergencies likely to be met by those resident in Hospitals is retention of urine. Mr. Heath has given very sensible directions for the treatment of this affection—but curiously enough he has omitted one very important practical precept with which we should think he must be well acquainted. It is this, that when a patient comes in with retention of urine, which condition is in all probability dependent upon spasm affecting an old stricture, a bougie or catheter should be gently passed down to the obstruction and after being held there for a few moments, should be suddenly withdrawn. This manœuvre will be found frequently to succeed, a stream of urine will follow, and much trouble to the Surgeon, and suffering to the patient will be avoided.

There is one little error which we must correct in the author's advice about strapping the breast, he states :—"This isone of the most efficient modes of giving support to an *inflamed* or enlarged breast." Now, much as we admire this treatment for chronic enlargements of the mamma, or for that condition which remains after an abscess of the breast has been evacuated, we must caution the young Surgeon against using compression when the breast is actually *inflamed*. This is an oversight which the author will correct in another edition.

It is impossible to recommend this work too strongly to all engaged in surgical manipulations: although it is intended mainly for the young, there are few amongst us who may not gain some very useful hints from this little book, which is furnished with numerous illustrations, and to which is added a selection of formulæ from various Hospital Pharmacopœias.

The Errors of Homœopathy. By Dr. Barr Meadows, Licentiate of the Royal College of Physicians, Edinburgh, etc. Pp. 45. London: 1861.

It is a laudable thing to oppose quackery and error, but unless the opposition be carried on with discretion and knowledge more harm than good is the result. Dr. Barr Meadows is acute enough in exposing the fallacies of the *similia similibus* principle; but he evidently is not well versed in the literature of Homœopathy, and he even commits the error so gratifying to Homœopaths of accepting the term *Allopathic*, "by which term," he says, "we mean the practice of orthodox Medicine"! Before Dr. Barr Meadows volunteers any further defence of "orthodox Medicine" he had better fag through Hahnemann's "Organon," where he will see that Homœopathy signifies "the excitement of a new morbific power, whose effects resemble those of the primitive disease;" and that *Allopathy* or *Heteropathy* signifies a system of cure "by attacking those parts which are sound in order to draw off the malady from another quarter." In fact, that Allopathy signifies what is called *diversion*, or creating one disease in order to relieve another. Of course we repudiate any such practice, and with it repudiate the absurd name which the Homœopaths try to fix on us. We are *Physicians*, servants of Nature; or *medici*, or ἰάτροι, healers of sickness; not miserable bunglers who make one hole to mend another. If a man does not understand Greek, he had better not accept a Greek epithet.

Lectures on the Diseases of the Kidney, generally known as "Bright's Disease" and Dropsy. By S. J. Goodfellow, M.D Lond., Physician to the Middlesex Hospital, and Joint Lecturer on Medicine at the Middlesex Hospital College. Pp. 308. London: 1861.

As these Lectures have already appeared in our pages, we need say little to recommend this volume, in which they are collected together, to the cordial acceptance of the Profession. They constitute an excellent summary of our present knowledge of a class of diseases than which, of late years, none have been the subject of deeper research. This book will be thankfully received by the student of Medicine; it is well adapted to his need.

On Epilepsy and Epileptiform Seizures—Their Causes, Pathology and Treatment. By Edward Henry Sieveking, M.D., etc. Second Edition. Pp. 336. London: 1861.

Dr. Sieveking retaining "the mould in which the work was originally cast" has replaced the "summary of cases" by "interspersing numerous illustrative cases, detailed more at length, through the body of the work," and has "also appended some formulæ for medicines alluded to in the body of the work." We commend the book in its improved form to the consideration of the Profession.

A Manual of the Practice of Medicine. By Thomas Hawkes Tanner, M.D., F.L.S., &c. Fourth Edition. Pp. 704. London: 1861.

Dr. Tanner's manuals are so popular, that the appearance of a fourth edition of one of them calls for little more than announcement on our part. The information contained in this new edition of his Practice of Medicine is brought up to the date of its publication.

Obstetric Aphorisms, for the Use of Students commencing Midwifery Practice. By Joseph Griffiths Swayne, M.D., Physician Accoucheur to the Bristol General Hospital, etc. Second Edition. Pp. 130. London: 1861.

This second edition of a very useful book will, we hope, be largely referred to by students who are commencing midwifery practice. It comes as near as anything we know to the ideal of sound practical teaching, except that Dr. Swayne is (as we venture to think most of our country *confrères* are) too meagre in the diet he prescribes during and after delivery.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

EXCERPTA MINORA.

Numerous Cæsarean Operations by one Practitioner.—Dr. Winckel, of Gummersbach, near Cologne, practising among a rural population living in a very wretched hygienic condition, and very subject to osteomalacia, has had occasion during nineteen years to perform the Cæsarean operation, on account of deformed pelvis, *thirteen* times, the deformity arising from osteomalacia in eight, and from rickets in five instances. In four of the cases gastrotomy was required only, as, in consequence of rupture of the uterus, the children lay in the cavity of the abdomen. This occurred twice in one woman, who had already once before undergone the operation. Of these three women two recovered; and, in fact, the issue of the operations must be regarded as favourable, seeing that six of the women lived, one of them having been operated upon three times, and therefore giving a proportion of eight recoveries to five deaths. After the operations, which were performed under chloroform, opium was given, and no inflammatory symptoms ensued.—*Monatssehrift für Geburtskunde*, vol. xvi. p. 401.

Re-Vaccination of the Prussian Army in 1860.—During the year 1860, 69,096 individuals were either vaccinated or re-vaccinated. Of this number 57,525 exhibited distinct cicatrices from former vaccinations, and 7420 indistinct cicatrices, while 4151 showed no marks at all. The vaccination went through its regular course in 44,193, was irregular in 8256, and was without result in 16,647. These last, vaccinated again, gave 5577 examples of success and 11,650 failures. During the year there occurred among the above soldiers who were successfully re-vaccinated, and others who had been so in former years, six cases of varicella and one of varioloid, but no case of variola was met with. Thus, during the year 1860, of 69,096 re-vaccinations, 49,770 proved successful, *i.e.*, 72 per cent. In the entire army there occurred 44 cases of pock during 1860—viz., 17 varicella, 23 varioloid, and 4 variola. Of these, 3 of the cases of varicella, 14 of varioloid, and 3 of variola occurred in persons who had not been re-vaccinated; 8 of varicella, 8 of varioloid, and 1 of variola occurred in those who had been re-vaccinated without effect; and the remaining 7, as stated above, occurred in those

who had been re-vaccinated with success. Three of the cases of variola died.—*Preuss. Med. Zeitung*, 1861, No. 13.

Bismuth in Obstinate Hiccough.—Dr. Lyster relates a case of hiccough which, after various remedies had been tried in vain, rapidly yielded to the employment of bismuth.—*American Medical Times*, No. 17.

FOREIGN CORRESPONDENCE.

GERMANY.

Breslau, April 30.

SILESIA: ITS INHABITANTS AND ITS DISEASES.

(Continued.)

In consequence of the general mode of living, especially the great quantity of beer which is drunk, the temperament of the Silesians, which is originally sanguine, is changed into a choleric or phlegmatic one; they have a great disposition to plethora, and deaths from asthma, apoplexy and dropsy are very numerous. Orginally cheerful, inclined to industry, and sometimes even witty, beer-drinking renders them stupid and lazy; and no doubt the very broad dialect which they speak, is also in some measure caused by this habit. In the larger towns the sedentary mode of life leads to congestions of every kind, hæmorrhoids, hypochondriasis and hysteria. In consequence of the damp weather catarrhs and rheumatism are very general. Tooth-ache is unusually common here; it is continually mentioned in the old writings, and at certain unhealthy times, for instance in spring, when the weather is generally wet and cold, one continually meets people with swollen faces in the streets. Fluor albus is a very common affection amongst the females; on an average one out of every three women suffers from it; and in the tables of epidemiologists, leucorrhœa is even mentioned as a special epidemic in Breslau.

Gout and lithiasis have greatly decreased of late; they are more frequent in the higher classes of society, although gout is sometimes brought on in the lower classes by the beer-drinking and living in damp houses. Lithiasis is endemic in the mountains, where it is often met with in children. When Silesia belonged to Austria, wine was cheaper and more generally drunk than it is now; that which is drunk here at the present time, is mostly very indifferent; and the enormous cultivation of our home-grown Grüneberger, a terribly sour beverage, justifies the supposition that this production, after having been exported, is returned to us under a different name.

Bronchocele is very common in the mountains; scrofula and rickets are frequent in this town. A celebrated clinical teacher used to call the scrofulous skin diseases which often take the form of lupus, "the armorial bearings of the town." The herpes exedens is found even more frequently in the country, where it is caused by bad food, uncleanliness, and badly ventilated dwellings. Scurvy, and in children noma, are also common. During the last few years scurvy has several times become epidemic in the prisons and barracks. Ophthalmia of a scrofulous and rheumatic kind is not rare, and a short time ago the military here were visited by Egyptian inflammation. Ague, especially the lighter forms of it, are common throughout the country; and in the unhealthy districts we meet with the more severe forms of quartana, which are protracted over a long time and often take a typhoid character. These diseases, chronic tumours of the spleen, small-pox, measles and scarlet fever, never die out in the country; and at intervals they take a malignant form and rise to great epidemics.

Medical aid is now easily to be had, as Medical men are very numerous here even in the villages; but the peasants are only with difficulty persuaded to avail themselves of their advice. They are generally satisfied with venesection, cupping, and quack medicines, which they either prescribe for themselves or procure from shepherds and old women. Many "blood-purifying" tinctures and herbs are in vogue here; Stahl's and Morrison's pills are also extensively sold. The benevolent sanitary institutions for the lower classes of this city are almost too numerous, they give advice and medicine to a large portion of the population for scarcely any remuneration; and the great competition compels many Doctors to be satisfied with a fee unproportionably small considering their trouble. Persons who can very well afford to pay their Doctors, are by no means loth to claim the assistance of such societies, to which they pay a halfpenny a week for Medical aid given to a whole family; and of course the status of the Profession must sink in consequence of it. In this respect it is just as bad in the country, where the common fee is twopence or threepence; and sixpence to one shilling is paid by the more respectable people in the towns. There is a great want of hospitals for the lower classes in the country. The Hospital of the Brothers of Mercy, Augustin Friars, in this city is the common refuge for the poor here; this order enjoys much confidence in the province, especially in Upper Silesia, and has also a Hospital at Pilchowitz, and one at Neustadt on the Austrian frontier. They now contemplate to build a fourth, in Lower Silesia, an undertaking which ought to be the more thankfully acknowledged, as the population there consists entirely of Protestants.

The population is continually increasing in Upper Silesia, while it remains stationary in Lower Silesia. The whole of it amounts to 3½ millions, that is about 1000 to the square mile. At the end of the last century only 750, and in the 17th century only 200 were living on the square mile. In the seven years' war Silesia lost 180,000 men. Before the Silesian wars which preceded the seven years' war the mortality here was 1 in 22; during the seven years' war it rose to 1 in 21; at the end of the last century it decreased to 1 in 31, and it is now 1 in 32, that is, nearly identical with that of the whole of Prussia, where on an average it amounts to 1 in 33. The rate of mortality in this city is more unfavourable, as it is 1 in 26. It is remarkable that this disproportion has already existed for a long time without having been changed for the better. In Berlin the mortality is 1 in 38, in London 1 in 40. Breslau was, after Augsburg, the first town in Europe in which regular bills of mortality were drawn up. The great astronomer, Halley, made use of them in his calculations of the probable duration of human life; and when, at the end of last century, the first Life Insurance Companies were founded in London, these bills were again used as basis for the calculation. Halley remarks, that in 1690 the population of Breslau was 34,000 and that, as on the average 1179 persons died in five years, the mortality amounted to 1 in 28. But this proportion is taken from years in which comparatively few deaths occurred. From 1717 to 1726 there died 1527 in a population of 36,000, that is 1 in 26, and if a greater number of years is taken together the deaths always amount to about 4 per cent., so that the medium duration of life is only 26 years in this city; that is, from 8 to 10 years less than in Berlin. The deaths have always been more numerous here than the births, so that the increase of population in this city is entirely due to immigration; and as the emigrants come especially from Upper Silesia, Posen, and Poland, the number of Roman Catholics is on the increase. In 1403 the population was 21,683; in 1555, 35,400; in 1608, 36,200; in 1675, after the thirty years' war, it had fallen to 30,130; in 1710 it had again risen to 40,890; in 1756 (the first year of the seven years' war) it was 51,774; while at the end of the war, in 1761, it had again fallen to 49,043; in 1770, it was 51,522; in 1860, 132,000. The wise and economic government of Frederic the Great, after the end of the war, only improved the increase of the population in a trifling degree, as from 1770 to 1780 several epidemics of famine typhus occurred, which again diminished the population. In the sixteenth and seventeenth centuries the plague prevented a large increase of it. During 181 years 53,890 more persons died than were born here. Between 1555 and 1633 about 30,000 died of the plague. In the epidemic of 1633 12,000 persons died here, while in 1636, only 10,000 died in London, with a far more numerous population. The plague raged in Silesia from 1708 to 1713, but it did then spare Breslau, where good sanitary arrangements had been made; in seven epidemics of plague, however, this city lost no less than 110,000 inhabitants; that is, at the rate of one-third of its population. When there was no regular plague, malignant typhus did the work of destruction. But in spite of this the losses were soon made up, as there is a great deal of commerce and intercourse here; although even now-a-days more deaths than births occur. In 1849 no less than 3000 people died of cholera, and the whole number of deaths in that year amounted to 7239, while only 3663 were born; the

population consequently fell from 105,000 to 102,000; but showed a remarkable increase in the following years, although cholera, typhus, and small-pox swelled the lists of deaths; in 1855, for instance, there were 2000 more deaths than births!

Independently of the climate, the narrowness of the streets contributes greatly towards rendering this city unsalubrious. One half of the population is crowded in the inner city, the area of which is not more than 691 acres. Of late years, however, an improvement has taken place in this respect, as in the healthier suburbs about 2000 new houses have been built; but the landlords of these houses let the cellars, which are damp and dark, as dwellings to the poor, and they become the hotbeds of fever and cholera. The mortality is especially great among children. Deaths of infants under 1 year, form one-fourth of the whole mortality, and 14 per cent. die from 1 to 6 years. The adults generally die of disease of the lungs, and other complaints of a dyscratic character. Consumption seems to be on the increase, and has probably its source in the disadvantages of all great towns, viz., overwork, bad air, and ill-ventilated dwellings. During the last century small-pox made great ravages on the population. Dropsy, which at that time became more frequent, was ascribed by the Doctors, not only to disturbances of menstruation in women, and badly cured ague, but also to the increased use of tea and coffee. The mortality has evidently become greater in proportion to the increased price of food. This is especially the case in Breslau, where the consumption of butchers' meat has diminished, so that it is now only sixty pounds for each person during the year, while the consumption of corn, and the poor-rates, have been augmented. The price of wheat has, within the last twenty years, risen from 4s. 6d. to nearly 8s.; that of rye from 4s. to 6s. 4d. The potatoes have also become more expensive; but the wages have not increased in proportion, viz. only about 15d. a-week. The use of wheat is in this city far greater than that of rye, and the inhabitants are extremely fond of cakes and sweetmeats. The number of confectioners and pastrycooks here is a matter of astonishment to every stranger. It is a striking fact that the Jews, who form about one-tenth of the population, are the healthiest of all. Among them there are more births than deaths, and only 1 in 38 die, while in the aggregate 1 in 26 die. Their morality is also of a higher character, as fewer illegitimate children are born among them than among the other parts of the population.

Jena, June 10.

THE UNIVERSITY.

Seeing that you have enveloped nearly the whole Continent of Europe in your net-work of "Foreign Correspondence," and that your readers are continually *au courant* of what is going on in the whole Medical world, a little news of what is done and what is going on in this corner of Germany may not be out of place in your columns. Saxe-Weimar is only a small duchy, of which Jena is not even the capital; and if merely the area and the number of inhabitants of this place is considered, it belongs to the very smallest towns in Germany, being without commerce and industry. The significance of Jena lies, in fact, entirely in its University; but by this, and by the powerful impulses to science and art which have more than once proceeded from here, it has exercised great and permanent influence upon the whole of Germany. The University, which was founded by the friend and protector of Luther, the Elector Johann Friedrich von Sachsen, more than three hundred years ago, was originally intended to become the nursery of youthful Protestantism, and to oppose the unceasing encroachments of Catholicism. Although the other Faculties were not neglected, still divinity remained the centre of gravitation and attraction in the new University as long as the Protestant doctrine was not acknowledged elsewhere, and civic equality was denied to its adherents. Thus Jena was the stronghold of Protestantism until the terrible time of the thirty years' war, which, although it ruined the political freedom of Germany by the creation of large standing armies, still resulted in the establishment of religious liberty. Most of the Protestant divines were educated here, where the doctrines of Luther were always strictly adhered to, while Calvinism reigned in Southern Germany. But even after Protestantism had no longer any dangers from without to fear—after other Universities had, with the renaissance of science, been founded—Jena did not lose its ancient reputation; but, in the course of the eighteenth and the commencement of the nineteenth century, again rose a star of first magnitude, and acquired a celebrity as is now not even possessed by our largest Universities. This was especially due to the circumstance that the Professors here, unlike most other Universities, were never dependent of the political and religious tenets of the time being, and were never in any way impeded or checked in the free exercise of their avocation. The development of science was never obstructed here, and the most complete liberty of thought existed. New doctrines which were not in consonance with those that had been received before were never forcibly suppressed, as was the case elsewhere; and the successors of the founder of this University always remained faithful to this principle. Eminent men who were banished from other countries for political or religious reasons found here a hearty welcome and a pleasant refuge and home. Many who were prohibited from teaching in their own land were here restored to their avocation, and found a large circle of eager and admiring pupils and friends. The study of philosophy flourished here in early times. The doctrines of Kant were more universally propagated from this University. It was here that, in the commencement of the present century, Fichte, Schelling, and Hegel propounded their metaphysical systems, and attracted crowds of enthusiastic students from all parts of the world. At a time when, in consequence of the struggle among the princes, and under the pressure of military monarchies, the political life of the country was well nigh extinct, when no independent middle classes existed, when the upper ten thousand slavishly imitated French manners and taste, science and poetry formed the only common tie which bound the nation together. The two places where both reached their grandest development were Weimar and Jena. It was at Weimar that Goethe and Schiller, in intimate friendship, and the most animated social intercourse, and under the protection of a generous prince, wrote their masterworks; while in this city a circle of the most eminent men of science, amongst whom were the two Humboldts, formed the burning centre of scientific life of the whole of Germany. Amongst the philosophers it was chiefly Fichte, whose lectures, essentially bearing upon practical life, and whose immediate personal intercourse with the students so powerfully influenced the rising generation as has never been done before or since. The impulse given by Fichte was not confined to science alone, but firmly implanted in the minds of his hearers the conviction of the necessity of a political transformation of Germany; and when, at the end of the war of liberation from France, the colleges were again filled, unions of students, which had not only a scientific and social, but also a political tendency, were first formed here and soon rapidly spread over the whole of Germany. Public manifestations of this spirit soon occurred, and gave the despotic Governments the opportunity to suppress the unions, and to visit the ringleaders with heavy punishment. The ire of the diplomatists was especially directed against this University, from which, if I may borrow the expression of Dr. Lionel Beale, the "germinal matter" of this new and dangerous tendency had proceeded and infected the other Universities. Congresses were held to deliberate on the best measures to be taken for the suppression of this spirit, and the Prussian Government even went so far as to prohibit its youthful subjects from prosecuting their studies here. Although the reputation of this University did, of course, not suffer by this, still the number of students was considerably diminished; their spirit, however, was in no way damped, and the peculiar "German student's life" is still as original and buoyant here as ever. The students consider themselves as beings essentially different from, and of course superior to, all others, their liberty being nearly absolute, and only kept within certain limits by the paternal balance at the banker's and the mild academical laws.

Within the last ten years the liberality of the Government, and the judicious administration of the University, have done much to raise the standard of scientific education. Several first-rate Professors have been called here, and the number of students again amounts to 500, of whom only the smallest proportion belong to the Saxon duchies, most of them coming from other parts of Germany, from Hungary, and Transylvania. The library, which is very considerable, and in some departments of literature as rich as any other, has so greatly increased of late that it was found necessary to erect a new

building for it, which, raised in the Byzantine style, is one of the chief ornaments of the town, and is very judiciously arranged, so that the books are easily accessible to the public. A new anatomical theatre was also built about two years ago, with which a museum for anatomy and zoology is connected. Dr. Gegenbaur, who is well known by his zoological and anatomical researches, and whose book on Comparative Anatomy is considered the standard work on this subject, is Professor of Anatomy. In the same building there is a physiological laboratorium, under the direction of Dr. von Berold, Professor of Physiology, pupil of Du Bois Reymond's and author of valuable contributions to the physiology of the nervous system. Two other well-known names are those of M. Schleiden, our Professor of Botany, author of "Das Leben der Pflanze" (The Life of the Plant), and "Grundzüge der Wissenschaftlichen Botanik" (Fundaments of Scientific Botany), and of M. Lehmann, our Professor of Chemistry, whose labours in physiological chemistry are second to none in importance.

The Hospital connected with the University is situated at the outskirts of the town, and has a charming view of the valley in which Jena is situated, and the mountains; in the high peaks and picturesque forms of which the German Emperor Charles V. recognised a likeness to the neighbourhood of Florence. Quite recently the Hospital has been enlarged, and now contains 120 beds, of which most belong to the surgical wards, which are under the direction of Professor Ried. This gentleman has for a series of years been Lecturer on Clinical Surgery, and is greatly esteemed and liked by the students; there are, perhaps, few Professors for whom students may, in after-life, feel so much attachment as they do for him. His great dexterity, calmness, and security in operating is well known, and patients come from long distances to place themselves under his care, so that he has ample opportunities for exercising his skill. In a future letter I will give you some information on the results of his experience, but will now only mention that he was amongst the first to recommend and perform resections, when they had not yet been recognised to be legitimate operations. A new edition of his work on resections has recently appeared.

I think this is the proper place to say a few words on the position of small Universities generally, which have of late been often violently assailed. It is asserted that, existing in small towns, and counting no more than from 200 to 500 students, they have outlived themselves and can no longer hold their own, when compared with the larger and richer Universities in the capitals; they should, therefore, be annexed to others, or they would perish by atrophy. Gentlemen who propound such views, forget that it is just the manifold centres of science and literature which exist in Germany, which we have to thank for the considerable development each single department of knowledge has taken in this country, and for the high and universally-spread education of the people generally; as from many centres, of course, a much more equal propagation of knowledge is possible than if the whole intelligence is concentrated in one single point. Regarding Medicine especially, it has been said that in the small Hospitals and Museums the students do not find sufficient material for observation; but to this view I might answer, in the words of Morgagni, "Non numerandæ, sed perpendendæ sunt observationes." A few very accurate observations are certainly better calculated to form the judgment of the Medical student than many superficially made; as one may easily satisfy oneself that if, in the commencement of Medical instruction, a very large number of patients is introduced to the students, the observations made have no time to fix themselves in the memory and mind, and pass away like so many dissolving views. There being only few students in the smaller Universities, each one has a far better opportunity for close observation of cases in the Hospital, post-mortem examinations, etc.; besides which, the relations between the Professor and the student are, of course, more intimate. In the clinics of Berlin and Vienna, where the students crowd in great numbers, no doubt very clever analyses of diseases are given by the Professors, and most instructive and striking cases are introduced; but the audience consisting of eighty or a hundred or more students, it is impossible for each one of them to satisfy himself, by personal examination, of the correctness of the Professor's statements, as they are literally at too great a distance from the patient to do so. These clinics are very important for enlarging the views of the student who has already gained a certain practical knowledge of diseases; and the wish to learn in this way, continually induces a great many young Doctors who have just finished their quadriennium to repair to Vienna, Berlin, and Prague for that purpose. It is true that in the larger Universities opportunities are also given for more immediate examination of patients, as well as for becoming practically acquainted with pathological anatomy, histology, and chemistry; but there the students generally fall into the hands of specialists, who are now certainly as numerous as they were amongst the old Egyptians, of whom Herodotus remarks: "Their Medicine is thus divided: each Doctor is only for one disease, and not for several, and there is no end of Doctors amongst them; for there are Doctors for the eyes, Doctors for the head, Doctors for the teeth, Doctors for the stomach, and Doctors for internal diseases."

BOHEMIA.

Prague, May 31.

Although the Medical Faculty of this ancient University has, at the present time, no such renowned names attached to it as when Kiwisch, Oppolzer, Arlt and Hammernik flourished here (one of whom is dead, another retired, and two called to Vienna), there is still much honest scientific work being done here, as is attested by periodical as well as other publications. I will to-day give you a short account of the views of Professor Löschner and Lambl, both Physicians to the Francis Joseph Hospital for Sick Children, on leukæmia, which I extract from a work just published by them and which contains a great amount of valuable matter. Concerning the mode of formation of the colourless blood globules, the two Professors say, that their immediate origin in the blood can no longer be assumed, since a free formation of cells does not take place; but the globules may be multiplied in the blood, by division of pre-existing colourless elements. The epithelium of the blood-vessels, especially that of the arteries, may also furnish a certain quantity of such elements, to which some degree of vitality cannot be denied, but the desquamation of epithelium from the inner surface of the blood-vessels is not proportionate to the quantity of colourless globules found in the blood, and can certainly not be considered as the principal source of them, which must be sought in the chylus and the lymph. The glands are the part in which blood is manufactured, and the colourless globules are parts separated from the parenchyma of the lymphatic glands; in certain pathological conditions an excessive formation of cells takes place by endogenous production within the cells of the connective tissue, which are intimately connected with the lymphatic system, as the roots of the lymphatic vessels are in direct communication with star-shaped cells of connective tissue. The mode in which the colourless globules come from the lymphatic system into the blood, is not yet satisfactorily explained. Virchow, in his "Cellular Pathology," makes only the following short remarks on this subject:—"It seems that some parts separate from the minute elements contained in the follicles, viz., the cells of the parenchyma, and afterwards mix with the blood as colourless blood or lymph-globules. The more enlarged the glands are, the more numerous are the cellular elements which go into the blood; and the larger and more developed are also the single colourless globules."

Professors Löschner and Lambl believe that the whole system of circulation is nothing more than a canalised connective tissue, the essential part of which in the small vessels, is the simple capillary wall, and in the larger vessels, the inner membrane; all the muscular elements, the elastic fibres and membranes, the adventitia, etc., are only accidental formations dependent upon the particular locality and function of the vessels. The lymph elements are formed in the capillaries, the inner membrane of the large vessels and the connective tissue, where they find a system of canals in existence, in which the blood and lymph are freely circulating, so that they may partly be carried away with them, while another part of them is retained in the areolar connective tissue, where it constitutes the tumours of the glands. A material alteration of the blood takes place if there is a new formation of such elements in the vessels.

Not all the colourless globules are capable of being changed into red ones; some undergo a retrogressive fatty metamorphosis and perish in the blood; others divide soon after having arrived there, and as the division proceeds from the nucleus, we often meet with cells containing two or more nuclei. In others, the nuclei are seen to become smaller and to disappear gradually, and are analogous to the atrophied pus-cells, the so-called pyoid or exudation corpuscles. From this it is evident, that a large part of the colourless globules circulating in the blood, are simple cells without any use, a sort of rubbish or superfluous ingredients of the blood, which can no longer be transformed into red globules and ought to be excreted from the system. The smaller part of colourless globules is, at an early period, metamorphosed into red corpuscles; and if a certain cell is, at the time of its arrival in the blood, developed beyond this stage, the specific metamorphosis does not take place, and is, in fact, impossible. The spleen is not the only organ, where blood is manufactured; all glands without excretory ducts, the tonsils, the lymphatic glands, the follicles of the mucous membrane of the intestine, the thyroid body, the thymus and even the liver participate in this function; and wherever the normal diffusion of matter is disturbed, a dyscratic disorder is the inevitable consequence.

Leukæmia is to be distinguished from a temporary augmentation of colourless blood-globules (leukocythosis), which is observed in pregnant women, and soon after meals. Besides, the amount of these globules is increased in inflammation, in typhoid fever, small-pox, in septic and marastic diseases; but this alteration of the blood is just as different from real leukæmia, as is chlorosis from the anæmia of persons suffering from cancer; leukæmia is also different from hyperinosis, an augmentation of fibrine in the blood, although an increased quantity of fibrine may also be found in leukæmic blood. It is essentially an albinism of the blood. While the normal proportion of the colourless globules is 1 in 357 or 355 red ones, it is in leukæmia 1 in 7 or even 1 in 2. Colourless globules being thus substituted for red ones, we find a larger amount of water in, and a less considerable specific gravity of, the blood; which in the milder forms of the disease is thin and pale-red, while in the more severe forms it becomes opaque and whitish; and the coagulum looks like the evacuated contents of an abscess. The large amount of colourless globules found in the vena cava descendens and in the venous heart, is partly due to the posthumous movements of the blood-vessels, partly to the circumstance that the ductus thoracicus there discharges its contents, and continues to contract for hours after death, while it is at the same time compressed by the meteorism of the intestines. Professors Löschner and Lambl agree with M. Virchow in assuming a lienal and lymphatic form of the disease, and say that its course is either acute and hectic, or chronic, and a hæmorrhagic disposition, which manifests itself especially in repeated attacks of epistaxis, is the cause of death.

PUS IN THE AIR OF SICK-ROOMS.

Dr. Eiselt, of this city, has recently succeeded in discovering pus in the air of a sick-room, in which several children suffering from inflammation of the eyes were lying. He caused the air to pass through an apparatus furnished with a contrivance for taking hold of any very small solid bodies which might be suspended in the air: these were afterwards subjected to a microscopical examination, when the characteristic pus-corpuscles were found. Previous experiments of M. Pouchet have shown the presence of other organic substances in the air. The importance of Dr. Eiselt's discovery is evident, as we can now easily explain why many diseases are contagious, and why overcrowding of sick-rooms, or the least impurity in the atmosphere of them, are dangerous to the health of the inmates.

TOLLS LEVIED ON MEDICAL MEN.

A striking proof of the general favour in which Medical men are held in this country, and of the confidence they enjoy with the public, is furnished by the fact, that a large number of them have been elected members of the Chamber of Deputies, which is now sitting. The Doctors here are certainly as well-educated and as hard-working men as anywhere; the fee generally given, however, is unproportionately small, especially for those who practise in the country. With the exception of the great railway-line which goes from Dresden by this city to Vienna, communication is still very imperfect in the country, and the roads are mostly in a bad condition. Apart from this circumstance, which causes great loss of time to the busy practitioner, a system of local taxation prevails here, which is mixed up with curious antiquarian details, with obsolete law and vestiges of the old spirit of feudal rapine. Passing tolls are levied on the unfortunate Medical traveller on his way to a distant patient to such an extent, that the small fee is nearly or entirely swallowed up by these payments, and the Doctor finds, on his return from the journey, that he has made it for nothing, unless he takes into consideration the wholesome influence of a long drive. These remains from the middle ages, when all travellers were regarded as fair booty by the congregations through which they passed, as game which was to be shot flying, ought certainly to be abolished as soon as possible. The burden falls especially upon the Medical man, as almost all other professions are exempt from it: Government officials, soldiers, clergymen and others, are never required to pay tolls, when travelling in their professional capacity. Only the Doctor, who every day spends advice and comfort to sufferers, who every day confronts death in its most hideous form, is compelled to see his small remuneration still curtailed in a manner which is as invidious as it is unjust.

GENERAL CORRESPONDENCE.

THE COUNCIL OF THE COLLEGE OF SURGEONS.

Letter from Mr. Adams.

[To the Editor of the Medical Times and Gazette.]

Sir,—I think it my duty to explain my position as a candidate for the Council at the election which takes place to-day.

Being the next by seniority on the list of the London Fellows, I should not have advanced my name at the present election, had I not been informed that two gentlemen, my juniors, had sent in their names as candidates for seats at the Council. Under these circumstances, it was obviously my duty, in self-defence, to put myself forward on the present occasion. I need not say that, otherwise, I should have been the last to attempt to disturb the existing order of things.

I am, &c.

St. Helen's-place, July 4. John Adams.

MEDICAL SCIENCE IN BRESLAU.

Letter from our Breslau Correspondent.

[To the Editor of the Medical Times and Gazette.]

Sir,—After the remarks you have been kind enough to append to the letter of Dr. Klopsch, which appeared in your Journal for June 22, it remains for me to say a few words only in reply to that communication.

1. It is a fact, that the meetings of the Medical section of the Patriotic Society are only attended by six or eight persons.

2. It is a fact, that the attendance at the sittings of the Medical Society of Breslau, is decreasing in an alarming manner, considering the youthful age of that learned body. Many Doctors have openly declared that, although being nominal members, and having paid their contributions, they are resolved never to take any part in its proceedings, as the Society in its present condition, does not serve scientific purposes, but personal interests only.

3. It is a fact, that Dr. Finckenstein, who is well known as a Physician and author of many valuable papers on Medical subjects, has conferred with other Medical men about the establishment of a Medical Journal, and entered into communications on that subject with the leading publisher in this town. The further circumstances of the case are of a far too personal character to be of any interest for your readers.

4. It is a sign of gross ignorance in a Medical man residing here, to rank M. Valentin among the ornaments of this University. It is true that Valentin is a native of Breslau, but he did not find any encouragement here, so that he was obliged to leave the country. But it is little short of a disgrace to conjure up the manes of poor Nees von Esenbeck,

who would have literally been starved here, unless the kindness of some English friends of his had provided him with means to relieve his distress. Most of the names mentioned by Dr. Klopsch belong to the glorious epoch of the Prussian Minister von Altenstein, whose sueeessors, Eichhorn and von Raumer, did everything in their power to ruin our seats of learning. Some of the gentlemen mentioned in Dr. Klopsch's letter have been here for a very short time only. The first of living chemists, Professor Bunsen, now of Heidelberg, also belonged to this University, but finding it impossible to stay here, left soon after he had been called to it.

5. When the members of the Medical Society of Breslau were requested by the Secretary to confirm the truth of the statements contained in his letter, by attaching their names to it, they declined to do so. This crowning fact will, no doubt, settle the question pending between Dr. Klopsch and

Your Breslau Correspondent.

Breslau, June 24.

POOR-LAW MEDICAL REFORM ASSOCIATION.

Letter from Mr. Griffin.

[To the Editor of the Medical Times and Gazette.]

Sir,—I shall feel obliged for space to inform the Poor-law Medical Officers that I have received a semi-official communication from the Poor-law Board, stating that it is probable the Select Committee may be able to take evidence touching Medical Relief on Friday, July 5, or Tuesday, July 9, and requesting to be informed if it would be convenient for me to attend on either of those days, to which I have replied in the affirmative.

Inquiry was made if I had published anything recently bearing on the case of Poor-law Medical Officers, and if so requesting copies. To this question I replied in the negative, and I might have given as a reason that, although I had the materials in manuscript for a goodly sized volume, the Poor-law Medical Officers, though formerly Liberals, had latterly become so parsimonious that I did not consider it prudent to set the printers at work, particularly as the last bill was only partially liquidated. I regret this excessive economy on the part of my brethren, as I have a series of tables prepared, which, if printed, would enable those gentlemen about to give evidence to do so upon a reliable basis.

On the 10th of this month was issued a Return to an order of the House of Commons entitled "Poor-law (Medical Relief)," which was moved for by Mr. Abel Smith. This document contains the name of every Union, the districts in which divided, population (Census, 1851), acres in each district, number of Medical officers, and the amount of salary and per case payment, the total amount of which is £184,184. In 1857 it was £177,269, showing an increase of £6915 in the four years. A large proportion of this increase I attribute to our agitation, the statistics furnished by the Association having, to my knowledge, been used to effect an increase in the salaries of some of the officers. I congratulate the gentlemen who have obtained an instalment of their dues; but as there are a great many who have as yet received no benefit from our efforts on their behalf, I think it but fair that those who have should contribute a something to assist their less fortunate brethren.

The report from the Select Committee of the House of Commons will, I trust, be favourable, but the Association ought to have ample funds at command, as considerable opposition may be offered by the Guardians to any ulterior measures, which can only be met by extensive printing.

As the question of payment will necessarily occupy a prominent part in this inquiry, permit me to say that my Tables are against payment in proportion to population, acreage, or pauperism, and that nothing but a per case payment, well guarded, by defining the class of persons to be entitled to Medical relief, with mileage, will meet the true requirements of the poor, the ratepayers, and the Medical officers.

I am, &c.

Richard Griffin.

12, Royal-terrace, Weymouth, June 29.

P.S. Those Poor-law Medical Officers who desire to give evidence had better write to the President of the Poor-law Board speedily.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 25, 1861.

Dr. Babington, President, in the Chair.

A Paper, by Dr. J. L. H. Down, was read,

ON A CASE IN WHICH THE CORPUS CALLOSUM AND FORNIX WERE IMPERFECTLY FORMED, AND THE SEPTUM LUCIDUM AND COMMISSURA MOLLIS WERE ABSENT.

The patient, a boy, aged nine years, was an inmate of the Asylum for Idiots, Earlswood, and had been under the daily observation of the Author for two years and a-half. He was the firstborn of three children, of whom the second (a boy) is also idiotic; the third and youngest (a girl) healthy and intelligent. No consanguinity existed between the parents. Prior to the birth of this child, and also to marriage, the mother had suffered intense pain in the side, caused, according to the opinion of Sir Benjamin Brodie, by renal oxalate of lime calculus. During pregnancy opiates had been largely resorted to; the parturition was normal. At nine years old, the time of his death, his mental capacity was very limited; he could only say two words, and had scarcely learned anything. A post-mortem examination was made thirty-three hours after death. The encephalon weighed 2 lbs. 8 oz. avoirdupois. The antero-posterior diameter of the cerebrum was 6½ in.; the width 5½ in. The antero-posterior diameter of each half of the cerebellum was 2½ in.; its entire width 3½ in. The size, form, arrangement, and colour of the convolutions of the cerebrum were normal. On removing the encephalon from the cranium, the hemispheres separated to an unusual extent, without bringing into view the great commissure of the brain. On separating the hemispheres the interiors of the lateral ventricles were exposed, and covering the floor of the interval the velum interpositum appeared, anterior to which, and on the same plane, was a narrow band of medullary structure. The velum interpositum being removed, neither fornix nor septum lucidum could be discovered, nor was there any trace of the commissura mollis. The medullary band, the only representative of a corpus callosum, had anteriorly and posteriorly ereseentie thinned margins, and measured at its narrowest part, which was slightly to the left of the mesial line, one-third of an inch. At a further stage of the dissection the lateral representatives only of the fornix were discovered. The rudiment of corpus callosum was situated opposite the widest portion of the corpora striata, and did not exceed one-sixteenth of an inch at any part of it; its fibres spread out anteriorly and posteriorly on reaching the hemispheres. This was the only case out of fifty brains of idiots examined by the Author in which the corpus callosum and fornix were imperfectly formed. Dr. Down referred to similar cases recorded by Messrs. Solly, Paget, and Reil, in which the patients were but little below the average standard of intelligence; and called special notice to the fact that, in those cases, the commissura mollis was present and extra large, while in the present instance it was entirely absent. He suggested that further inquiry would possibly lead to assigning a higher importance to the commissura mollis than had hitherto been attached to it.

Mr. Septimus W. Sibley, F.R.C.S., communicated some

CASES ILLUSTRATING THE CAUSES AND EFFECTS OF OBSTRUCTIONS IN THE ARTERIES, BOTH OF THE BRAIN AND OF OTHER ORGANS.

The object of this communication was to review a series of cases which had occurred in the Middlesex Hospital, with the view more especially of testing the theory which ascribes these obstructions to the washing away of vegetations, etc., from the valves of the heart. The cases were divided into four groups. In the first group (eleven cases) were placed those instances in which softening of the brain was found associated with a plug in one of the cerebral arteries. In the second group were placed three cases in which there was softening of the brain associated with vegetations on the valves of the heart; but in these instances the state of the

cerebral arteries was not ascertained. The third group was formed by two instances of cicatrix of the brain, which the Author believed to have been produced by the plugging of a cerebral vessel. In the fourth group were placed ten instances in which there were fibrinous deposits in the internal organs, but in which the brain was not affected with softening. The cases were then analysed. It was found that in twelve out of the fourteen examples of softening of the brain there were fibrinous deposits in the internal organs; the remaining two cases were not complete. It also appeared that, in twelve out of the fourteen cases of softening of the brain there were warty growths on the valves of the heart. In one of the remaining cases there was extensive atheromatous and calcareous disease of the aorta; in the other the heart and vessels were healthy, but there was hepatization of the lung. Other points relating to the fibrinous deposits in the organs were also analysed; and this was followed by a comparison of the symptoms in the cases of softening of the brain. The Author proceeded to describe the phenomena which followed the sudden obstruction of an artery. The complete arrest of circulation, the attempt at its restoration, and the reason why in the cases of the brain, spleen, and kidney this attempt is not successful. The partially restored circulation is characterized by a zone of enlarged vessels around, and by a low form of inflammation in the part affected. In consequence of this the nutrition of the part is damaged, and fatty granules accumulate among the cell-structures, thus causing the bright yellow colour which is seen in the so-called fibrinous deposits. As the circulation becomes more complete, the more plastic products of inflammation are formed, the yellow colour fades, the bright zone of enlarged vessels slowly disappears, and at length a cicatrix is formed. The paper concluded with a review of the arguments for and against the theory which supposes these fibrinous obstructions to have been washed away from the cavities of the left side of the heart. The Author believes that obstructions may be formed in the arteries, or that they may be washed away from the heart; and after describing the mode in which obstructions formed in these two modes are to be distinguished from each other, he proceeded to give the reasons for affirming that in all the cases mentioned in this paper the plugs had come from the heart, from the arteries, or from an inflamed lung. The chief arguments made use of for arriving at this conclusion were: the peculiar appearance and structure of the plugs; their analogous structure to warty growths on the valves of the heart; the situation at which plugs are usually met with; the condition of the artery at the obstructed part; the occurrence of several plugs in neighbouring or distant vessels; the very frequent frequent, or indeed almost constant, association with fibrinous deposits in the spleen and kidney, and, lastly, the arguments which are derived from a consideration of the symptoms of this form of brain disease.

THE PATHOLOGICAL SOCIETY.

Tuesday, May 21, 1861.

Dr. Copland, President, in the Chair.

Mr. Lawson exhibited a specimen of

SCIRRHOUS STRICTURE OF THE CŒCUM,

taken from a woman, aged 56, on whom an operation for the relief of obstruction had been performed during life. On opening the abdomen the obstruction was found to be cancerous disease of the cœcum, and, therefore, the bowels was retained, and the obstruction was not relieved.

In reply to Mr. Canton, Mr. Lawson stated he did not make an opening into the bowel.

Mr. Hutchinson wished to ask Mr. Lawson whether the case of Mr. Fergusson's to which he had alluded, really resulted in recovery. He would also extend the question, and would put it to the members generally, and would ask whether anyone present was acquainted with a single English case in which the operation of opening the abdomen to search for a cause of intestinal obstruction had been followed by the recovery of the patient. He did not refer to operations for the establishment of artificial anus, but to those aiming at the relief of internal obstruction without opening the bowel.

Mr. Lawson replied that in Mr. Fergusson's case to which he had alluded, the operation was delayed too long, the patient being almost *in articulo mortis*. After the removal of the obstructing band, the bowels were relieved, and again the next day. The patient, however, died.

Dr. Crisp had collected many cases of intestinal obstruction. He remembered a case of Mr. Hancock's in which an obstruction was relieved by incision into the right iliac fossa, by which a large quantity of matter was evacuated. The patient recovered, or was alive at the end of eight or nine months. The difficulty in cases of obstruction was to know when an operation was justifiable, as there were instances of recovery when the patient was apparently moribund.

Mr. Canton had seen Mr. Hancock's case. The patient ultimately recovered. She had been suffering from constipation and pain in the right iliac fossa. Subsequently an abscess formed, it was opened, and from it were removed two small brown nodules. It was believed to have been a case of perityphlitis.

Mr. Hutchinson remarked that Mr. Hancock's case was clearly not one of the class to which he had referred. He would add that he had asked the question because he believed that no English case had occurred followed by recovery, and inasmuch that probably not fewer than from fifty to a hundred of these operations had been undertaken, he thought it ought to become an almost absolute rule of Surgery to decline to perform it. Every one had seen cases of abdominal obstruction in which although the patient had passed into an apparently hopeless condition, yet recovery unexpectedly resulted. The only recoveries of gastrotomy with which he was acquainted were one or two recorded in America, of which negroes had been the subjects. In English practice it was impossible, even if it were not unjustifiable, to operate early, and experience had proved that it was worse than useless to do so in a later stage.

JUNIOR MEDICAL SOCIETY OF LONDON.

Thursday, June 27, 1861.

Mr. J. Wood, King's College (V.P.), in the Chair.

A Paper was read by Mr. R. Liveing on

THE PHYSIOLOGICAL AND THERAPEUTICAL ACTION OF ALCOHOL.

The Author commenced his Paper by a notice of the present unsettled state of opinion among members of the Medical Profession with regard to the physiological and therapeutical action of alcohol. It was then pointed out that the action of alcohol cannot be regarded as essentially different in health and disease, and that its therapeutical effects are best explained by the consideration of its physiological action. After a rapid review of the opinions of the most eminent modern writers on this subject (particularly those of Drs. Todd, Parkes, E. Smith, and Marcet), the theory of the action of alcohol, which regards it as a food specially adapted for the nutrition of the nervous system, was briefly discussed, and it was shown that the drug is probably eliminated from the body unchanged, and must therefore be considered merely as a stimulant. It was proved that the exhibition of alcohol is in almost all cases attended by a diminution in the total amount of solid matter excreted; lastly, its effects on the heart and the process of aëration in the lungs were considered. Mr. Liveing then proceeded to discuss the therapeutical value of alcohol in disease, pointing out that it could not be considered as an antidote, in the strict sense of that word, to any disease. He considered the effects of alcohol in acute disease as of two kinds—viz., injurious or beneficial as regards the natural progress of the case. Among the former were placed the following:—1. Its tendency to prevent the excretion of morbid poisons. 2. The hindrance it offers to the aëration of the blood. 3. The impairment of general nutrition. 4. Its directly injurious effects on mucous membranes. Among the class of beneficial effects were enumerated:—1. The increase in power, and diminution in the rapidity, of the heart's action. 2. The diminution in the waste of the tissues of the body. 3. The not unfrequent sedative effect of alcohol on

the nervous system, promoting sleep. It was shown that, though in most acute diseases the administration of alcohol may be both beneficial and injurious, yet that in very severe forms the beneficial preponderate over the injurious effects. In conclusion, it was stated that no general rules could be laid down for the administration of alcohol, but that it must be left to the judgment of the Practitioner in each particular case.

Mr. Yeo (King's) thought Dr. Todd's advocacy of the use of alcohol in continued fever had led to a routine practice, and that by giving it in the early stages one was deprived of its more valuable aid in the later.

Mr. Brett (Westminster) held that, inasmuch as alcohol decreased the waste of tissues, it should be taken in moderation by the labouring classes.

Mr. Christopher Heath (Westminster) believed that alcohol was now too often administered where bleeding should be adopted. With regard to its diminishing in some cases the frequency of the pulse, he believed that to be due to its restoring tone, and thereby its regular rhythm, to the heart.

Mr. Hicks (Guy's) did not regard alcohol at all in the light of food. He believed it acted as a stimulus only.

Mr. Lamb (Guy's) observed that beer tended to the formation of adipose tissue, while spirits predisposed to fatty degeneration of the heart and muscles.

Mr. Harley (King's) asked what was the ultimate effect of alcohol on the economy. Does it act primarily by altering the constitution of the blood, or directly on the nervous system? He thought the latter. Death from the effects of alcohol, he observed, was by asthenia.

Mr. Deane (King's) spoke from personal experience of the prevalence of alcoholic abuse in India. It was not confined to northern nations.

Mr. Power (University) corroborated this statement, and remarked that the use of arrae in India dated long before the arrival of Europeans.

Mr. Morton (King's), remarking on the innate craving for alcohol among civilised nations, said he considered it a food for the nervous system.

Mr. Clarke (King's) exhibited

A REMARKABLE CASE OF ARREST OF DEVELOPMENT IN THE PERSON OF A GIRL, AGED SEVEN YEARS.

Both the upper extremities were absent; both scapulæ and clavicles were perfect; but there were no humeri. The left lower limb was perfect and well formed, but the right had only a rudimentary femur. The other bones, however, of that limb were perfect. She used her feet most admirably in the place of hands, especially the left, with which she washed her face, lifted a cup and saucer to her mouth, etc. She is an intelligent child, and can walk very successfully, despite the disparity of length of her legs. This was evidently a case of deficiency of "budding," and not of spontaneous amputation.

The next meeting will be held at Guy's Hospital in October next.

MEDICAL NEWS.

Royal College of Surgeons of England (a).—The following gentlemen have just passed the Preliminary Examination in General Literature:—

Andrews, R. J.	Finden, W.	Plaister, W. H.
Ash, R. V.	Foster, C. W. E.	Powne, B. L.
Ashmead, G.	Gill, J.	Pughe, D. R.
Bartlett, E.	Harding, T. H. G.	Roberts, T. A.
Bartlett, W.	Hayden, J. A.	Robinson, A. W.
Bertin, H.	Hiron, W. N.	Skelton, H. D.
Blandy, H.	Hopgood, P. D.	Sinclair, S. F.
Chinery, E. F.	Hussey, J. F.	Skinner, W.
Clarke, R. N.	Jones, G.	Smith, H. C.
Clements, G.	Lewis, C.	Stephens, W. K.
Curtis, C. E.	Little, W.	Stevens, G. J. B.
Cautley, P. L.	Lucas, R. H.	Taylor, J.
Dessé, E.	Lucas, G.	Thompson, J.
Downes, W. F.	Lyle, W. V.	Trimmell, E. A.
Earle, F.	Mackinnon, H. W. A.	Wood, W. H.
Edgelow, G.	Morris, H.	Walker, H. G.
Ellis, A.	Mountain, W. J.	Webb, J.
Ensor, J. A.	Murrell, J. F.	Wood, R.
Fairbank, J.	Noyes, F.	Wright, W. E.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

APPOINTMENTS.

Broadbent.—Dr. Broadbent has been appointed co-Lecturer on Physiology and Pathology at St. Mary's Hospital Medical School, in the room of Dr. Markham, resigned.

Corfe.—George Corfe, M.D., King's Coll. Aberd., has been elected Physician to the Western General Dispensary, Marylebone-road, in the room of Dr. Greenhow, resigned.

Lane.—Mr. Lane has been appointed co-Lecturer on the Principles and Practice of Surgery, at St. Mary's Hospital Medical School, in the room of Mr. Coulson, resigned.

Lyons.—Robert Dyer Lyons, M.D. Trin. Coll. Dub., L.R.C.S. Irel., K.C.C., has been elected Consulting Physician to the Royal College of Maynooth, *vice* Dr. Corrigan, resigned.

Tassell.—Mr. Robert Tassell, M.R.C.S.E., L.A.C., was appointed Surgeon to St. Augustine's County Prison, Canterbury, on the 28th June last, the post being rendered vacant by the death of Mr. D. B. Major.

DEATHS.

Ammon.—The celebrated Ophthalmologist, Von Ammon, Physician to the King of Saxony, has recently died at Dresden.

Barton.—June 26, Frederick William Barton, of Spon-street, Coventry, M.R.C.S. Eng., L.S.A., aged 44.

Clowes.—June 23, William Clowes, of Stalham, Norfolk, M.R.C.S. Eng., L.S.A., aged 55.

Farran.—June 29, at Feltrim, Malahide, Ireland, Charles Farran, M.D.

Freer.—May 2, John Freer, M.D., late of the 97th Regiment of Foot, on half-pay.

Froriep.—Dr. Robert Froriep, the former celebrated Professor at Jena and Berlin, has just died at Weimar, of cerebral congestion.

Harris.—June 26, John Harris, of Springfield House, Bedford, F.R.C.S. Eng. (Hon.); M.R.C.S., L.S.A., aged 58.

Leapingwell.—June 20, after a lingering illness, William Leapingwell, of No. 5, St. John's-street, Oxford, M.D. Edin., M.R.C.S. Eng., L.S.A., aged 54.

Logan.—June 29, at Prestwick, Thomas Logan, late of Glasgow, Student of Medicine.

Royle.—June 27, at Bury St. Edmunds, Suffolk, Theodore Henry Stratton Royle, L.S.A., aged 36.

Warner.—June 23, John Warner, of New Haw, Chertsey, Surrey, formerly of St. Paul's-terrace, Islington, M.R.C.S. Eng., L.S.A., aged 45

Williams.—June 22, Herbert Read Williams, of Chippenham, Wilts, M.R.C.S. Eng., retired, but formerly in practice for many years at Gloucestor.

At the annual General Meeting of the Association of Metropolitan Medical Officers of Health, held at 8, Richmond-terrace, Whitehall, on the 3rd of July, Dr. R. Dundas Thomson was elected President; John Simon, Esq., Dr. Ballard, and L. Beale, Esq., Vice-Presidents, for the ensuing year.

Royal Institution of Great Britain.—At the last General Monthly Meeting the Secretary announced that the Fullerian Professorship of Physiology was vacant, and that the Managers would appoint a Professor on May 12, 1862.

Danger of Delay in Confining Lunatics.—M. Griolet, a most respectable Practitioner of the town of Sommières, Department du Gard, while engaged talking with a friend in the street, was shot through the head. He was taken up lifeless, and it was found that the murder had been perpetrated by a young man, the subject of mania, whom he had seen and bled some hours before, awaiting the decision of his friends as to sending him to an asylum. In the mean time he had been shut up in the room from the window of which he fired upon Dr. Griolet, who was not only the Physician but the friend of the family.

Medical Meeting at Norwich.—The East Anglian Branch of the British Medical Association held their annual meeting at the Norfolk and Norwich Hospital on June 28, under the Presidency of W. Cadge, Esq. The President delivered a most admirable address, and the following papers were also contributed:—"On a Case of Paralysis of the Insane, with Remarks," by Dr. Ranking; "On Lithotrity," by Mr. Henry Thompson (London); "On a Case of Chorea in a Child," by Dr. Durant (Ipswich); On a "Case (with specimen) of Tumour of the Larynx," by Mr. Crosse (Norwich); "On Glaucoma and Iridectomy," by Mr. Soelberg Wells (London). The meeting (as well as the dinner which followed it) was numerously attended, and much interesting discussion took place. Stowmarket is to be the place of meeting next year, and Mr. Spenser Freeman the President.

Death from Chloroform.—M. Mailly, formerly a Paris *interne*, having settled in the Mauritius, was about to return to France with a fortune, which he had acquired with great labour. He was in the prime of life, but suffering from

toothache, went to a dentist, armed with a bottle of chloroform, in order to have the tooth extracted. In spite of the remonstrances of the latter, he insisted upon administering the chloroform to himself. The extraction was rapidly effected, a sudden movement of the head seeming to indicate a sensation of pain. Almost at the same instant he was seized with convulsions, his face at the same time becoming of a violaceous red. In spite of all the means the dentist could have recourse to, the convulsions increased in severity, and before further aid could be procured his patient had expired, five minutes probably having elapsed since the extraction of the tooth.—*L' Union Médicale*, No. 75.

Mr. Cooke's Ventilator.—In a lecture delivered at the Hanover-square Rooms last Wednesday, Mr. Pepper exhibited a small model of a house built in the ordinary way, to show the effects of the folds of wire gauze attached to the top of the window sashes by Mr. Cooke. When ventilation was required, the window was pulled down and the gauze unfolded, admitting as much fresh air as was required without the usual accompaniment of a draught. Mr. Pepper experimented most conclusively with nine lighted candles supposed to represent the ladies and gentlemen congregated within the room it was proposed to ventilate. The apartment having been rendered air tight, all but one small crack over a door, the candles soon began to show symptoms of imperfect combustion, and the necessity for air, the condition of some of them becoming so bad in a short time, that their light could with difficulty be saved by an application of the ventilator: those in a less advanced stage of decline were promptly restored. Under all the disadvantages of an experiment on a small scale like this, the principle was shown to be thoroughly successful, and its adaptation to the window sashes of ordinary dwelling-houses at a trifling expense to be a vast improvement over many other means of procuring ventilation.

Suicide in the French Army.—The frequency of suicides which have taken place amongst the soldiers stationed at Paris has called forth the following order of the day:—"Soldiers,—For some time past numerous instances of suicide have occurred in the first corps. The Marshal in command has been surprised and deeply afflicted at this, and he desires to state to the regiments under his command that such acts of weakness, committed with premeditation, are condemned alike by religion, morality, and duty to country. I have already told you, soldiers, and I repeat it, that God, our common Father, prohibits this. Passion, sensual violence, despair, will not excuse this abnegation of self. Are you not aware that man, and especially the soldier, exists only on earth to suffer? and you have not now courage to bear life with all its pains. The soldier who kills himself commits an act of cowardice and ingratitude. His life is not his own; it belongs to his country, which demands it of him, and which, in the hour of danger, relies upon the army. Do not give way to despair and weakness on account of some sorrow, or some fatal passion, still less for some disappointment or some punishment incurred in the service. Rouse your energies and let your soul rise above all its weaknesses. When these fatal ideas agitate your minds, when the struggle becomes too strong for you, seek me out and open your hearts, as you know I am always accessible to you. My soldier's heart will comprehend yours; it will save you from these cruel ideas, and will recall you to the sentiment of duty, and will preserve you for your family, for France, and for the Emperor, who loves and relies upon you.—Magnan."

Duty of a Physician to the Public in a Case of Poisoning.—M. Tardieu, treating of this important question in Medical Deontology in his lectures on Medical Jurisprudence at the Faculty, communicated to his auditors a letter written by Lamennais to Dr. Pierquin of Montpellier:—"You have done me the honour of asking my opinion on the question, 'Is a Practitioner who perceives that a patient to whom he has been called has been poisoned, under the moral obligation of declaring his well-founded opinion to the authorities?' Without doubt, in many cases, a mere private person is not obliged to reveal to the authorities a crime of the certain existence of which he is aware, and sometimes charity may even render it a duty on his part to observe silence. But is this the case with the Medical Practitioner? On the contrary, is he not in an essentially different position? The Physician is a public man, and he has special duties towards society which ensue from his very function, and he should advertise it of the crimes which he alone is in a condition to discover and bring home, otherwise these crimes, which are always amongst the most heinous, would never be known except by some extraordinary contingency, especially now when the art of poisoning has made such fearful progress, and when crime seems to have taken refuge in the bosoms of families, destroying all security of life. The confessor is compelled to secrecy for other reasons, It is almost always the criminal who comes to him, and his conscience is a sanctuary he cannot leave. But the Physician who discovers that which, so far from being confessed to him, is sought to be hidden from him, has two duties to perform,—one towards his patient, and the other towards society, whose minister he is on this occasion; and if, as cannot be doubted, he ought to advertise the magistrate when a disease exhibits alarming signs of contagion, how much more is he called upon to reveal that which implicates not some person only, but society itself?" The *Union Médicale*, while adhering to the above doctrine, cautions its readers that excessive care and circumspection should be employed before making any spontaneous declaration of the kind. Mere doubts are not to be revealed, these requiring first to be converted into a settled conviction and a commencement of certainty.

On Monday, the 1st inst., a deputation from the National Medical Registration Association, consisting of the President, John Lavis, Esq., Dr. Wright, Jabez Hogg, Esq., Members of the Committee, with their solicitor, Hedgwin Gough, Esq., and the secretary, Mr. Becker, had an interview with the Amendments Act Committee of the Medical Council, and presented forty-two memorials from the Local Registration Associations in the provinces, praying for an amendment of the 40th clause of the Medical Act. The gentlemen present at this meeting discussed fully the failure of the 40th clause, and we trust the question will be fully considered by the General Council. It may be urged in favour of the London Association that it has been able to get together the evidence and memorials presented on Monday.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 29, 1861.

BIRTHS.

Births of Boys, 963; Girls, 941½; Total, 1904.
Average of 10 corresponding weeks, 1851-60, 1662·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	594	498	1092
Average of the ten years 1851-60	589·3	520·5	1109·8
Average corrected to increased population..	..	..	1220
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West'.. ..	463,269	..	9	5	4	10	7	7
North ..	618,181	..	5	8	3	12	5	6
Central ..	377,794	1	1	4	7	11	4	4
East	570,898	..	1	3	..	15	4	7
South ..	772,892	..	4	7	2	28	11	8
Total.. ..	2,803,034	1	20	27	16	75	31	32

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·609 in.
Mean temperature	60·1
Highest point of thermometer	77
Lowest point of thermometer	47·7
Mean dew-point temperature	54·1
General direction of wind	S.W.
Whole amount of rain in the week	0·63 in.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Moore sends notes of two patients who were reduced in weight, one from 16 stone 9lbs in February to 13 stone 11lbs in June—and the other from 15 stone to 13 stone, by following the system of diet recommended in his little work on Corpulency.

A Dyer.—When the colouring matters of coal-tar were first introduced, there was a great fear that the workmen engaged in their manufacture would suffer in health. But Mr. Perkin says that, during the few years he has had to do with this branch of manufacture, there has not been a single case of illness among the workmen that has been produced by any operations carried on for the production of aniline purple.

Errata.—Page 679, col. 1, line 2, *for* "Sick Clubs" *read* "Book Clubs."—Page 688, col. 2, line 7, *for* "not under nor above twenty-six years of age," *read* "not under twenty-one nor above twenty-six years of age."

The "London Medical Review."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—On behalf of those gentlemen who have kindly promised me assistance in conducting the *London Medical Review*, may I ask permission to state, through the medium of your Journal, that the *Review* has now entirely changed hands both as regards the Editor and Proprietors.

I enclose my card. I am, &c.
London, July 4. The Editor.

A Hint to a Querist.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reply to a letter signed "Medicus," of last week, I beg to recommend him to try the effect of blistering the excoriated surface, and also the ulcers, with the emplastrum lyttæ, and treating the ulcer afterwards with simple dressing, occasionally touching it with the solid nitrate of silver if necessary. This practice was first introduced by Mr. Ure, and has been successful in every case that has come under my notice.

I am, &c.
Edward Parker Young,
July 1. House-Surgeon to St. Mary's Hospital, W.

On the Use of the Sulphate of Iron in Herpes.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having had occasion within the last few years to treat a fair number of cases of the above-mentioned disease, and having made use of various remedial agents in the form of local applications, I have arrived at the conclusion that an ointment containing the ferri sulphas is most efficacious, in the proportion of six to ten grains of the sulphate to an ounce of lard, to be used night and morning.

I commence the treatment of the disease by the administration of a brisk purgative; and after having had the patient placed in a warm bath and thoroughly cleansed, the use of the ointment is begun. The usual effect of repeated application of the ointment is that of causing a shrivelling of the vesicles, with their desiccation and disappearance. The disease, as is well known, often defies other treatment for a long time; under the above procedure the average time of cure extends to about a week. I am, &c. E. T. Palmer, M.A.,
Dublin, June 25. Assistant-Surgeon, Royal Artillery.

Scarborough Royal Northern Sea-Bathing Infirmary.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—My attention has been called to an article in your Journal of the 8th inst., and as you appear to be under some misapprehension in regard to the course taken by the Committee on the subject of dietary, I beg to hand you a copy of the resolution which was sent to all the Medical officers of the Charity (not to Mr. Dale in particular), and which was done with the sanction and approval of the Consulting Medical officer, and has not been objected to by any of them with the exception of Mr. Dale.

The following is a copy of the Resolution:—

"That, on account of the dissatisfaction that has arisen amongst the patients from the prescription of a special dietary and stimulants to some of the inmates, the Committee would respectfully call the attention of the Medical staff to the desirableness of not deviating from the ordinary dietary more than they think absolutely necessary; the cost of this extra diet being likewise a matter of considerable importance to the Institution."

It was intended as a courteous suggestion, not with the view of interfering with the Medical officers or of fettering them in the exercise of their judgment, and as such I am glad to say it has been received by all the remaining Medical staff of the Infirmary.

Into the special causes which led to the Resolution I need not now enter. I am, &c.
Scarborough, June 13. R. Hine, Jun., Secretary.

"The London Medical Review."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Some discreditable circumstances having been brought to light, in your last number, respecting the proprietary management of the *London Medical Review*, with which periodical I was at one time connected, I must request the favour of room in your columns for the purpose of stating, in the first place, that I never knew anything of Mr. S. E. Smith, even by name, before I was induced, in company with other Medical men, to take a share in the literary work of the *Review*; and, secondly, that my relations to that Journal were always those of a contributor only.

Were the literary value of the *Review* the subject at issue, I should have been contented, for my part, with pointing to the manner in which I conducted the section (Foreign Department) under my supervision, with only a very limited space at my command, and to the simple fact that many of my contributions were reproduced by various British and American Medical papers, but—after the unenviable notoriety which the *Review* has obtained—I find that certain accidental coincidences, such as the identity of my name with that of the proprietor, render it incumbent upon me, both in justice to myself, and in explanation to my numerous friends, to trouble you thus lengthily upon this matter. I am, &c.

Wm. Abbotts Smith, M.D., M.R.C.P.,
Senior Physician to the City Dispensary,
Assistant-Physician to the Metropolitan Free Hospital, etc.
38, Doughty-street, July 1.

COMMUNICATIONS have been received from:—

Professor Simpson; Dr. Jenner; Mr. Teale; M. Claude Bernard; Dr. Waller; Dr. Ramskill; M. Du Chaillu; Dr. Hawkins; Dr. Cotton; Mr. Griffin; Dr. Carson; Mr. Crosse, Norwich; Dr. Kennedy; Dr. Hamilton, New York; President and Fellows of the College of Physicians; Registrar-General; Dr. Roser; Professor Varnell: Mr. Eccles; Mr. Marston, Malta; Mr. Pepper; Mr. Cooke; Mr. Mills; Mr. Baldock; Mr. Dickson; Dr. Perroud; Mr. A. W. Moore; Mr. Tassell; Mr. Snowe; Mr. Coleman; and our Correspondents at Breslau, Berlin, Berne, Copenhagen, Paris, Prague, Vienna, and St. Petersburg.

APPOINTMENTS FOR THE WEEK.

July 6. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

8. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

9. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

10. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

11. *Thursday.*

Operations at St. George's, 1 p.m; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

12. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Samaritan Free Hospital Lectures, 4 p.m. Dr. Rogers "On Some Diseases of Mal-Assimilation in Early Childhood."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Lithotrity; Removal of Tumour from Parotid region; etc.

ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture XVI.

ON THE INFLUENCE OF THE NERVOUS SYSTEM ON THE CHEMICAL COMPOSITION OF THE BLOOD.

Summary: The Nervous System interferes in the absorption of Oxygen by the Blood—This Fluid is usually of a bright ruddy Colour in the Renal Veins—This state of things is found to exist during the Process of secretion in all Glands, throughout the System—Bernard's Experiments on the sub-maxillary Gland in Dogs—The result of these Experiments confirmed by the Analysis of the Blood—In the Muscular System the inverse is the case: the Venous Blood is black during the period of activity, and ruddy when the Muscles are at rest—For this reason, the colour of venous Blood, taken as a whole, is dark, the Phenomena of Muscular Activity being continuous during Life—Hunter's remark on the effects of Syncope—The existence of the two different Orders of Vaso-motor Nerves affords a Key to all these Phenomena—Respiration a more complicated Function than was formerly believed—The absorption of Oxygen takes place not within the Lungs, but in the very depth of our Tissues—The division of the Sympathetic Nerve acts as an impediment to this Process, and causes the Arterial Blood to pass almost unchanged into the Veins—Comparative Analysis of the Gases contained in Blood during the periods of Rest and Activity in both Muscles and Glands.

Gentlemen,—Before entering upon the subject which we intend to treat in the present Lecture, allow me to seize the opportunity which offers of showing you that our experiments on animals are not always attended with the serious consequences that might be apprehended; we now place upon the table a dog, which, towards the commencement of this course, was the subject of the experiments on recurrent sensibility, performed in your presence: the animal is at present in the full enjoyment of health, and has recovered from all the consequences of the operation. Within a few days, we will sacrifice this animal, in order to show you the modifications which arise in sensitive and motor roots when divided.

The rabbit, in which the cervical branch of the sympathetic nerve was cut the other day, is also doing quite well, and continues to exhibit the symptoms of an entirely local disorder on the corresponding side.

We are now going to pursue, Gentlemen, the series of investigations which have led us to trace the influence of the nervous element from the functions which evidently lie in close connection with it to those which appear the farthest removed from its power, and after examining the interesting properties of the nerves of organic life, after ascertaining the results which arise from this excitation, as well as from this entire paralysis, we are about to call your attention upon a still more important part of that subject, viz., the influence which they exert upon the chemical composition of the blood, and we are prepared to show, that one of the most indispensable functions of life, the absorption of oxygen in the lungs, and its combination with the histological elements of our tissues, is equally placed under the control of the nervous system.

In our experiments on the urinary secretion, we were struck with the singular appearance of the blood which flows in the renal veins; its colour is usually of a bright red, like that of arterial blood, although at intervals it resumes a darker hue. The fact is easily ascertained in most animals, particularly in the rabbit, the vascular parietes being in this animal exceedingly thin and transparent. On further examination these phenomena were found to be connected with the process of secretion as carried on in the kidneys; the ruddy arterial colour of the blood contained in the veins corresponding to a period of activity in the gland, and its darker hue to a period of rest. We were then led to examine the state of the blood in other secreting organs; the submaxillary gland, in the canine species, being large and superficial, was selected for this purpose, and we ascertained that the venous blood in this gland, is usually of a dark purple colour, but grows scarlet as soon as the process of secretion commences, a result easily obtained by galvanising the tympanic nerve, or pouring a few drops of vinegar upon the animal's tongue. We thence inferred that if the venous blood is usually red in the kidneys, this result arises from the almost incessant activity of the urinary secretion; while in the submaxillary gland, the functions of which are intermittent, the ordinary colour of the blood is similar to that observed in other parts of the venous system.

The analysis of the gases contained in this fluid fully corroborates the foregoing conclusions. The bright ruddy colour of venous blood coincides with the presence of an unusual proportion of oxygen; while in its ordinary state, it contains a much larger quantity of carbonic acid gas. You therefore perceive, Gentlemen, that during the process of secretion the fluid which circulates in the veins, retains the chief characteristics of arterial blood, and that nervous influence, acting, as it does, upon the glands, is capable of accelerating or retarding the absorption of oxygen in the very depth of our tissues. In the muscular system the effects are reversed; when the muscles enter into contraction, the venous blood grows quite black, and scarcely contains a trace of oxygen; when, on the contrary, the muscles are at rest, it slightly resembles arterial blood.

The great distinction drawn by Bichat between the two different conditions of this fluid, before and after its passage through the lungs, is not, therefore, strictly in accordance with facts, for the physiological state of the tissues, through which it circulates, exerts, as you see, a powerful influence on its chemical composition; if venous blood is usually of a dark purple colour, if it contains little oxygen, and a large proportion of carbonic acid, it derives these properties from the incessant activity of the muscular system, which, in the living animal, is never at rest, since even during sleep, the heart and respiratory muscles are constantly in motion; patients in a state of syncope alone form an exception to this rule, and Hunter remarks that when blood is drawn from the veins under such circumstances, it is invariably of a bright red colour.

All these phenomena, in our opinion, are satisfactorily accounted for by the opposite action of the two classes of vasomotor nerves,—those which dilate, and those which contract the vessels; let us consider the effects of their antagonism upon the respiratory functions.

It was formerly believed that the oxygen introduced into the lungs was then and there chemically combined to the elements of the blood, creating in this manner a sort of combustion within the air cells, from which the carbonic acid exhaled, and the animal heat produced during the process of respiration, were both derived. But the operation is a more complicated one than our predecessors had supposed; and we are now aware that the combination of oxygen with the cast-off materials of the economy takes place, not within the lungs, but in the very depth of the tissues themselves, and that as long as this gas remains in the blood, the respiratory process is not accomplished. Viewed in this light, the function is one of those which immediately obey the influence of the nervous system, as we shall now proceed to show.

If we divide the sympathetic nerve in any given region of the body, we set at liberty the system which opposes its action: the vessels are then dilated, and the blood passes from the arteries into the veins without undergoing any material change; and, when drawn from the jugular, it is almost as ruddy as that which escapes from a wound inflicted on the carotid. The active state of glands, and the passive condition of the muscular apparatus, are equally favourable to this peculiar appearance of blood in the veins: and however different these various causes, all tending to the same result, may at first sight seem to be, they coincide in one most important particular,—the acceleration of the passage of this fluid through the capillary network which lies between the two great vascular systems; in fact, we know these delicate vessels to be the principal seat of Nature's chemistry: in this point do the elements of the blood come into close contact with the materials which compose our tissues and enter into combination with them; in the capillaries do all these intimate operations take place, and the heat which arises from the chemical phenomena of life is generated there. Oxygen is conveyed into the tissue of the blood-corpuscles, and after reaching its destination is converted into carbonic acid, or

other compounds. But the chemical affinities to which all these transformations are due cannot be called into full play, unless the blood stagnates for a certain lapse of time in the smaller capillaries: time is one of the most indispensable conditions for the production of similar changes. If, therefore, it is intended to propel the blood from the arterial into the venous system without altering its properties, without depriving it of the oxygen which it contains, to accelerate its passage is the safest method of obtaining this result; if on the contrary, it is desired to create in this respect as wide a difference as possible between the two orders of vessels, the circulation must be retarded; now these opposite effects are produced, as you are well aware, by galvanizing or dividing the sympathetic nerve.

When it is intended to secure venous or arterial blood, under these various circumstances, for the purpose of chemical analysis, we believe the following method will be found the most available:—The principal artery and vein of a muscle being laid bare, contractions are excited by means of a galvanic pile; and the blood is drawn with a fine syringe from the vessels in which it is contained; for the contact of atmospheric air would partially oxygenate this fluid, and vitiate the results of the experiment. We generally select for this purpose the Rectus femoris, which in most animals, and particularly in the canine tribe, is readily separated from the adjoining muscles.

When all the proper precautions have been taken, the observer is enabled, in this manner, to ascertain:—

1st. That when a muscle contracts, the venous blood contains less oxygen, and more carbonic acid, than in a state of rest.

2nd. That, on comparing arterial and venous blood, the quantity of carbonic acid which the latter contains is not found sufficient to account for the total amount of oxygen which has disappeared; it would therefore appear that the transformation is not directly operated, but that various intermediate compounds are produced.

3rd. That the solid residue which remains after evaporation is larger in blood drawn from a muscle in full activity than in the fluid obtained from a muscle at rest.

It is hardly necessary to say that inverse results are obtained in operating on the glands; we know, in fact, that their period of activity coincides with the ruddy colour and arterial state of the venous blood.

The following table exhibits the results of this analysis:—

Gases contained in the Blood.

		Arterial blood.	Venous blood. State of rest.	Venous blood. State of activity.
Rectus femoris	Oxygen	9·31	8·21	3·31
	Carbonic acid	0·00	2·01	3·21
Submaxillary gland	Oxygen	9·80	3·92	6·31
	Carbonic acid	0·98	2·94	2·10

Solid Residue of the Blood.

		Arterial blood.	Venous blood. State of rest.	Venous blood. State of activity.
Rectus femoris	Loss by Evaporation	73·86	76·84	75·24
	Solid Residue	26·14	23·16	24·76

You see, Gentlemen, how extensive the influence of the spinal cord is found to be on going deeply into the subject; it extends to phenomena which, at first sight, appear totally unconnected with the nervous system.

ORIGINAL COMMUNICATIONS.

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. IX.—Scabies.

Itch, Gale, Krätze.

(Disease due to the presence of the Acarus Scabiei.)

Scabies is a disease which, although met with principally amongst the lower classes, is one of the most frequent of the parasitic affections of the skin. It is indeed sad to reflect upon the number of cutaneous diseases which are brought about almost solely from want of proper attention to cleanliness. Far be it from me to say that dirtiness is the exciting cause of scabies, but it is quite evident that the itch insect is rarely met with amongst the higher classes, unless after exposure to contagion among the dirtier and lower ranks of life. It is much more frequent in some countries than in others, and I shall have occasion to describe a variety of scabies which is quite unknown in this country, and principally met with in Norway, a loathsome and frightful malady, the penalty paid for long-continued and excessive filthiness and neglect.

Scabies has long been known, and descriptions of its ravages are handed down to us from the remotest ages. There is, however, much difference of opinion as to the time when the true cause of it was determined, that is to say, when the insect was first detected. Some are of opinion that it was known to Avenzoar who lived in the twelfth century. According to Hebra, however, it was first discovered by our countryman Moufet in the year 1663. Very many authors have also been said to have detected the insect, but so recently as 1812, much doubt existed as to whether there was, or was not, an itch-insect. At this time a considerable prize was offered by the Parisian Academy of Sciences for its demonstration. M. Galès, an Apothecary at the St. Louis Hospital, tempted by the reward, defrauded the Academy and gained the prize. He concealed beneath the nail of his thumb the common cheese mite, opened with a lancet the pustule of a patient affected with scabies, and produced the insect from beneath his nail, pretending to have removed it from the patient. The discovery of the fraud was made by Raspail but not for seventeen years afterwards, and a little later by Gras. In 1834 Renucci, a young Italian Student, detected and demonstrated the parasite in its furrow beneath the epidermis.

These remarks apply to the female itch insect. The male, according to Hebra, was first discovered by Danielssen and Boeck in cases of Norwegian scabies, but M. Bourgogne, who makes such beautiful microscopic preparations, and for which he gained a medal of the first class in the Paris Exhibition of 1855, informs me that he was the first to detect it. According to Devergie, on the other hand, the honour is due to M. Lanquetin, a pupil of the St. Louis. It is really very difficult to know who was the first to discover it, but this at all events is pretty certain that there is hardly a single discovery in the whole range of Medical science which has not been claimed by at least one Frenchman.

The study of the habits of the insect is very interesting, and these have been carefully investigated by Hebra, from whom I draw largely in the following remarks:—When the female is placed on the skin it seeks a suitable spot, and then, its head raised at right angles to the skin, it penetrates into the deeper layers of the epidermis where it lies embedded, and derives its nourishment. If impregnated, as is usually the case, an egg is soon laid, to make room for which the insect burrows a little further. Each day a fresh egg is laid, and each time the insect penetrates further, leaving its deposited eggs to occupy the space formerly inhabited by itself. The direction of the canal thus produced is oblique, the portion first formed being nearest the surface. As the old epidermis is thrown off and new layers are formed at the expense of the deeper strata, the first laid eggs gradually approach, and finally reach the surface, while the recently-deposited ova, owing to the oblique direction of the canal, still remain covered by epidermis. In this way the eggs reach the surface just about the time when the young one has come out of its shell. The newly-hatched acarus (I refer to the female) having arrived at the surface crawls about the skin, meets its mate, becomes impregnated, and then burrows likewise, and repeats the process just described. The length of time which usually intervenes between the laying and the hatching of an egg is fourteen days, and as the acarus lays generally one egg daily, there are rarely more than fourteen eggs in one canal, although there may be many more egg-shells, the acari having escaped.

On cutting out one of these canals, therefore,—cuniculi, sillons, milbengänge, as they are called—and examining it with the microscope, the female insect is found at the extremity furthest away from the opening, which it originally made in penetrating the epidermis, and behind it, its eggs in various stages of development, those nearest the acarus being in the most primitive condition. Besides the acarus and its eggs, numerous little oval or rounded blackish spots are seen,

which are supposed to be the excrement, and the whole forms a very beautiful preparation under the microscope. *Some* female, and *all* male acari go about free on the surface of the epidermis, and it is only after impregnation that the female burrows for the purpose of depositing its eggs. After the female has once entered its canal it is unable to recede, owing to the little spines on its dorsum, which project backwards. Sexual intercourse between the male and female takes place on the surface of the epidermis, and Hebra states that in a case of Norwegian scabies, he had once the opportunity of seeing them in contact, although, as he says, "he could not decide whether or not they were in the act of copulation."(a)

The *eggs* of the acarus are about $\frac{1}{25}$ of a line broad, and $\frac{1}{15}$ long, according to Förster, but they vary much in size, according to their age and the length to which the process of development has gone. For just before the larva has burst its egg, the latter is almost as large as the male acarus. In the earliest stages the egg is very small, and filled with a granular-like matter.

Fig. 15.

Fig. 15.—*a*, Egg in the first stage; *b*, in the second stage (the granular contents in *a* and *b* are yellow in the original); *c*, ditto in third stage, insect becomes apparent; *d*, Ditto in fourth stage, insect has broken the shell; *e*, Egg-shell after escape of acarus.

At a later period, as it increases in size, its contents seem to shrink and recede from the shell, and to have a distinct enveloping membrane. They have a bright yellow colour and granular appearance, thus contrasting strongly with the clear almost colourless walls of the egg-shell without. (See Fig. 15, *b*.) Soon after this the head and legs of the acarus become distinctly apparent, and at last the whole insect within the egg-shell, a most beautiful microscopical appearance. (See Fig. 15, *c* and *d*.) Finally, after the acarus breaks loose, the egg-shell is seen shrivelled up and marked usually by two longitudinal slits made by the insect in effecting its escape. (See Fig. 15, *e*.)

The larva, or young acarus (see Fig. 16), differs from the

Fig. 16.

Fig. 16.—Larva, or young acarus—having only two hind legs.

full-grown insect in that it has only two hind legs instead of four. By-and-by, however, it throws off its coat and appears with eight legs. Sometimes the full-grown insect with eight legs may be seen inside its old six-legged skin. This renders the history of the development of the acarus pretty complete.

The full-grown itch insect (acarus scabiei, sarcoptes hominis) is just visible to the naked eye, having a yellowish-white colour. Under the microscope, the same tint is detected, but the limbs and head are darker, having a reddish-yellow appearance.

The following remarks apply to the female (see Fig. 17):—

Fig. 17.

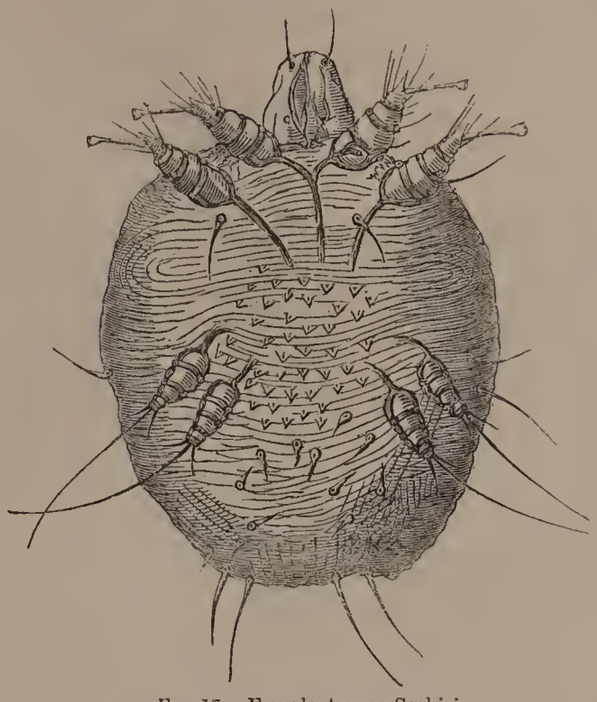

Fig. 17.—Female Acarus Scabiei.

In size, it varies from $\frac{1}{7}$th to $\frac{1}{4}$th of a line in length, and from $\frac{1}{10}$th to $\frac{1}{6}$th of a line in breadth. It is almost egg-shaped, being broader anteriorly than posteriorly: anteriorly it is provided with a head and four legs, two on each side of, and close to, the head.

The *head* projects considerably beyond the body; its edge is rounded, and marked by a central fissure corresponding to the mouth, which is provided with mandibles, on each side of which are several hairs. No eyes have been detected.

The *legs* are eight in number, four anteriorly and four posteriorly. They have a conical shape, tapering towards a point, and each is composed of several jointed segments. The four anterior legs are provided with stalked suckers, and from the extremity of each of the posterior legs projects a long curved hair. Each of the anterior legs is also provided with several small hairs springing from beside the root of each sucker.

The *body* is marked by numerous regularly disposed, wavy lines, and the dorsal surface, which is convex, is provided also with numerous little angular spines, as well as by little round tubercles from each of which springs a small conical spine. From each side of the body two hairs project and four posteriorly, so that, including those springing from the hind legs, the posterior half of the body is provided with twelve long hairs.

Fig. 18.

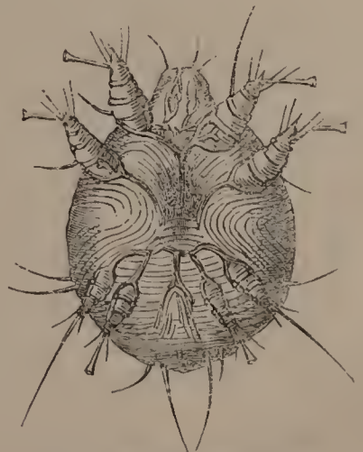

Fig. 18.—Male Acarus Scabiei.

(a) "Allgemeine Weiner Medizinische Zeitung," August 28, 1860, p. 280.

The male (see Fig. 18) differs from the female in so far as it is considerably smaller, the wavy lines on the body are not so numerous, the inner pair of posterior legs are provided with stalked suckers like the anterior ones and the parts corresponding to the genital organs are very distinctly marked.

(To be continued.)

THE FEVER AT LIVERPOOL.

By J. CAMERON, M.D.

Physician to the Liverpool Southern Hospital.

There appeared in the *Lancet* of May 11, in reference to the outbreak of fever in the Southern Hospital, a letter from the late House-Surgeon, Mr. Pemberton; and the statements he makes lead to the inference that, with respect to the nature of the disease from which the Egyptian sailors suffered, I have publicly given an opinion contrary to that which I entertained. I could not allow so grave an imputation to remain unnoticed, and for its refutation I forwarded on May 20 a letter to the Editor; but to my surprise it was not inserted, nor was any notice taken of its contents; neither have any reasons been assigned for a course which seems to me inconsistent with that usually displayed by the press. In the meantime Mr. Pemberton's letter has been seen and commented on in this town, not only by the Profession, but by the trustees of the Hospital by whom my silence, I fear, may have been misconstrued. Under these circumstances I venture to ask the favour of the insertion of the following in your columns, and must apologise for the necessity of entering into details, apparently trivial and insignificant, but which, taken together, have an important bearing on the question at issue.

Mr. Pemberton begins by stating that, in his opinion, the Egyptian sailors "were suffering from fever on their admission, and that he has now no doubt, from what has since transpired, that that fever was typhus, but which, in consequence of their dark skins preventing the characteristic mulberry rash from being seen was not recognised as such." The presumption is, however, from his *admission* of these men, that he did not consider them to be labouring under fever; for he was well acquainted with, and has, on several occasions acted on our rules which forbid the reception of such cases. I would rather, for his own sake, believe that his memory failed him when he wrote the letter of the 11th, than that he knowingly introduced into a General Hospital patients affected with a disease, which, if fever, must, of necessity, have given rise to the calamitous events we have had to deplore. This inference is supported by my recollection of what occurred, for he referred them to me as cases of "dysentery," and on all occasions we spoke of them by that designation. I would beg, especially, to call to his recollection a conversation in which I alluded, as a guide for our management, to the reception into the Workhouse Hospital of the soldiers who arrived from the Crimea suffering from dysentery.

It is scarcely necessary to add that I did not coincide with his "opinion,"—an opinion which I hear now for the first time. In fact, I am not aware that the subject of fever had been thought of until it attacked Mr. Pemberton, and in a few days afterwards appeared in the wards, which left no room to doubt that the Hospital had become infected, and it was then that this question was first mooted. Doubts were expressed as to the accuracy of my diagnosis, and it was assumed that the Egyptians had laboured under typhus which had eluded recognition. This view offered so plausible a solution of an otherwise exceptional and unusual occurrence, that it had for a time the effect of shaking my confidence in my own judgment; but, after a careful and anxious re-investigation of all the circumstances relating to this epidemic, I remain convinced of the accuracy of my original opinion, viz. that, excluding the patients suffering from pulmonary symptoms, all those who were seriously ill, laboured under acute asthenic dysentery in its different stages.

With regard to the condition of the ship, Mr. Pemberton disbelieves the statement that "none of the men were suffering from fever," and he asks, "Who can prove this?" But his doubts cannot set aside the evidence afforded by the report of Dr. Duncan, Medical Officer of Health, in which we find it stated that the men on the sick list "were suffering from dysentery, diarrhœa, frost bite, and other consequences of exposure to cold." Then, there is the testimony of Mr. Irvine, a Surgeon who, on being called in to attend the crew, reports that none of the men were suffering from fever (*Liverpool Mercury*, March 29; *Medical Times and Gazette*, April 20). Further, six men who died before their comrades were admitted into the Southern Hospital, were certified by the Surgeon of the ship as having died of "dysentery." And it is not unimportant that, of the persons who visited the frigate, only three were attacked by typhus, viz. the pilot who brought her into port, a druggist's assistant, and a boy from a Naval School; and of 200 of Messrs. Forrester's workmen, employed in repairing the ship during the first fortnight after her arrival, not one suffered from the disease.

Mr. Pemberton states, as a proof that the Egyptians had typhus, that "the symptoms in some of the more severe cases were great prostration, heat of skin, rapid pulse, low muttering delirium," etc.; yet I find, on referring to the Register, that he certified as having died of "dysentery" the two which proved fatal whilst he was still doing duty, and which we must presume he would include among "the more severe cases." (The first had been seen only by himself, and the death of the second was certified without any intimation from me as to the nature of the disease.) The two other Egyptians who died subsequently were likewise certified as having died of "dysentery," and had previously been entered in the register by Mr. Pemberton as suffering from "dysentery" and "dysentery febris."

Besides, he must be well aware that the group of symptoms which he seems to look upon as pathognomonic of typhus may be, and frequently are, the attendants on the last stage of acute visceral disease. I observe also that he speaks of the "mulberry rash" as the only infallible diagnostic of typhus; whereas, this cutaneous eruption, now so generally present, is not an essential part of the disease. I had extensive opportunities of studying the phenomena of typhus during the epidemics which prevailed in this town from 1839 to 1846, and the affection of the skin was then the exception, not the rule.

He next appeals to the Hospital Register, in which he says (omitting all notice of dysentery), "the diagnosis recorded in the majority of cases will be found to be 'febris' and 'febricula.'" To show the value of this argument, I subjoin a copy of the Register, premising that, in consequence of its not being intended for professional use, the nomenclature adopted by the House-Surgeon is not unfrequently careless and at variance with scientific accuracy; a remark borne out in the present instance by the strange conjunction of terms employed by Mr. Pemberton. He is, however, aware that the terms "febris" and "febricula" are used in our Hospital somewhat loosely and indiscriminately, to designate, not a specific fever, such as typhus or typhoid, but the symptomatic, non-contagious, febrile disturbance, arising from exposure to cold or fatigue, from hard drinking, or other cause which fails to excite local disease of a sufficiently serious character to admit of easy classification. It is most frequently seen in sailors after exposure to severe weather, which has entailed hard work and loss of rest, and in whom it is then accompanied by pains and aches in the limbs, but without constitutional derangement severe enough to indicate "rheumatism"—patients who recover in a few days by means of a warm bath, some diaphoretic medicine, and the comforts of the Hospital. During the last twelve months twenty-four cases answering to this description were admitted by Mr. Pemberton, and registered under either one or the other designation. The only ground for his statement, that I had "approved" of the diagnosis, must, I presume, have reference to a conversation, during which he informed me, shortly after the admission of the Egyptians, "that he had experienced some difficulty in making up the Register, and that, in inserting the names of the diseases, he had, to some extent, been guided by my prescriptions." I had not seen the Register, but, considering the matter of very little importance, and not anticipating this controversy, I rejoined, "that I had no doubt they would answer." Mr. Higginson, he added, had likewise "approved" of the diagnosis; but my colleague authorises me to state that he never examined my patients, nor gave an opinion as to the "diagnosis."

COPY OF REGISTER.

Dysentery	6 cases.
Dysentery Febris	2 ,,
Febris Dysentery	1 case.
Diarrhœa	1 ,,
Diarrhœa Febris	2 cases.
Febris	4 ,,
Febris, etc. (certified by Mr. Pemberton as dying of "dysentery")	1 case.
Febris Ophthalmia	1 ,,
Febricula	8 cases.
Febricula Bronchitis	1 case.
Febricula Frost-bite	1 ,,
Gangrene of Leg	1 ,,
Debilitas	1 ,,
Pneumonia	1 ,,
Frost-bite of Toes	1 ,,
(Admitted February 25 and 27.)	32

The following details will enable your readers to form their own opinion respecting the nature of the diseases recorded above. I may state that I write from memory, but with a perfect recollection of the leading phenomena presented by the patients who were seriously ill, and whom I visited twice daily. Those alluded to in my former communication as "slightly indisposed," requiring little or no Medical treatment, did not receive much of my attention, and I am thus unable to speak accurately of their symptoms. They were weakly, and complained of pains in the limbs, more especially in the legs and feet, accompanied, in some instances, by a slightly febrile state,—symptoms which I attributed to the exposure to cold and wet. As soon as they had received a change of clothing (the second day after admission), they adjourned to the bath-room, where they performed their ablutions in accordance with their customs (described to me by Mr. Pemberton); one man lying at full length in the bath whilst his comrade poured water on him. They ate well and slept well; were seen walking about the wards and corridors, or chatting together as they sat cross-legged on the beds and benches. They shaved each other, and performed for one another the more kindly office of exterminating the vermin with which their heads were infested. The term "Febricula," or "Febris," has been adopted by Mr. Pemberton in these cases; and I have a distinct recollection of two, answering to the foregoing description, that are registered "Febris,"—one was a man known as "E," (Ward 1), the other known as "A," (Ward 2), a noisy, ill-behaved fellow, who from the first refused his medicine, but took his food with avidity.

The Surgical patients, I am informed by my colleague, Mr. Higginson, presented no constitutional derangement excepting that occasioned by the local affection.

Two cases of pulmonary disease are registered, whereas there were four,—two of pneumonia, one of bronchitis, and one of sub-acute pleurisy (a negro, in Ward 8). These demand no especial notice.

With the exception of the last-mentioned, the only patients requiring attention suffered from purging, more or less severe; and as these are the cases of real importance to the question at issue, I shall describe, as fully as I am able, their symptoms and general condition. In the milder cases the bowels acted perhaps three or four times in the twenty-four hours; the pulse ranged from about 80 to 100, not more; the tongue was white and moist. They did not seem to suffer much from thirst. Very soon after admission—within the first two or three days—these men were walking about the wards and fairly convalescent. In the severer cases the bowels acted from eight to twelve times in the twenty-four hours. This is an approximation; but I cannot convey a better idea of the character of this symptom, as well as of the nature of the disease, than by quoting the answer made to my inquiries by the nurse of Ward 8, who said, respecting one of the worst cases under her charge, that "the man was always in the water-closet." Tenesmus and abdominal pain accompanying each motion were present to a greater or less extent,—symptoms which the men indicated by pointing both hands joined together against the lower part of the abdomen. Tenderness on pressure, though present in a few instances, was not a well-marked symptom. In none was the abdomen tympanitic. The pulse ranged between 100 and 120, with heat of skin and thirst. The tongue of these patients presented, more or less developed, the raw and red surface characteristic of severe dysentery.

Notwithstanding the severity of the local disorder, these men moved themselves in bed with ease, sat up to arrange their clothes, and helped themselves to food and drink. Those who used the night-chair were able to get in and out of bed without assistance, and the others walked unassisted to the water-closet.

The stools were not reserved for examination; for I was anxious to avoid adding to the effluvia with which the atmosphere of the wards was already surcharged; and I did not at the time notice, either in the symptoms or progress of the cases, any circumstance calculated to raise my doubts as to the nature of the disease.

The digestive functions were comparatively unimpaired; for, even in the worst cases, the food, which consisted of rice, arrowroot, and milk, was taken freely and with relish.

The only patient who suffered from cerebral symptoms was a man in Ward 8, named Ibrahim Omar, whose case is registered "Febris Dysentery." He improved rapidly under the treatment adopted (Dover's powder, blister to abdomen, and opiate suppositories), when, on or about the 4th or 5th of March, he was seized with rigors, and, coincidentally, with an anomalous form of cerebral excitement. His manner became altered; he talked frequently, and in a loud voice and with great volubility, this excitement being more especially marked when I came to his bedside. He was more riotous at night, often getting out of bed and walking about the wards, whilst during the day he enjoyed several hours of calm and uninterrupted sleep. He continued to help himself to food, which he sometimes took with eagerness, though at other times he refused it, and he still made use of the night-chair. In the course of a few days he was restored to his former condition, this favourable change being attended by a copious perspiration, which lasted several hours. Whatever may have been the exact nature of this cerebral disturbance, its peculiar character, mode of accession, and disappearance, point evidently to some complication superadded to the original affection.

Three cases, entered in the register as "dysentery," "febris dysentery," and febris ophthalmia," (Wards 1 and 2), were the only patients whose symptoms presented any resemblance to the picture drawn by Mr. Pemberton. They were brought to the Hospital in a state of extreme prostration, in fact, in an almost hopeless condition, but death was threatened by exhaustion, not coma. They lay in bed in a dull, languid state, taking little notice, yet roused without difficulty, their eyes sunken, and their features expressionless. They took the nourishment administered by the nurse, and put out their tongue at the request of the interpreter. There was no subsultus. From the amount of conciousness they exhibited, I did not suspect delirium; but this is a symptom of which, considering their state of prostration, and my ignorance of their language, I would speak with reserve. One of them, Achmed Demena (Ward 2), whose case is registered "dysentery," and who died on the second day after admission, was able to inform us through the interpreter, "that he was much purged, and had great pain in the abdomen." These men at first passed their stools in bed, but, I believe, simply from an inability to exert themselves, and an indifference to cleanliness, such as is often seen in Hospital patients during the last stages of dysentery; for as they rallied, they were made to understand the use of the bed-pan and night-chair. The man already alluded to was able, with the assistance of his comrades, to get on the night-chair only a few hours before his death, and while there, was seized with syncope. The second, Said Sala, registered as "dysentery febris" (Ward 1), continued to improve for some time after his admission; but the purging, although checked, did not cease, and eventually he died on March 11. I saw him the day before his death, when I found him very prostrate, but perfectly conscious, and holding in his hand a piece of bread, which he was eating with relish.

No post-mortem examinations were made.

The third case, known as "B," (Ward 2,) and recorded "febris ophthalmia," suffered from sloughing of each cornea, a complication I have seen before in severe dysentery. This man recovered, his progress being, I may say, very rapid.

In reviewing the symptoms manifested by these men, (the

last three excepted,) we observe, persisting throughout their illness, a consciousness to suffering, and an unimpaired state of intelligence utterly inconsistent with any form of typhus, in which, even at an early period, there is a blunting, soon followed by a complete suspension of the cerebro-spinal functions; and we see in their acts a power of unassisted exertion equally incompatible with a disease characterised by the rapidity with which prostration supervenes; a contrast presenting itself in a stronger light when the violence of the local disorder is considered. We have a further diagnostic symptom of some value afforded by the comparatively slight interruption which occurred in their digestive functions.

The three exceptional cases cannot be put forward as types from which an opinion is to be formed, inasmuch as their nearly hopeless condition reduced them to a state in which many acute diseases assume at first sight a close resemblance. Yet there were, in the assemblage of their symptoms, points of difference which clinical observation can detect better than the pen can describe, and which, in my opinion, pointed unmistakeably to the nature of the disease. That Mr. Pemberton participated in my opinion is evident from his having registered two of the cases as "dysentery."

But, in addition to the symptoms, the progress of these patients becomes an important element in the diagnosis. For, omitting the three exceptional cases, all the others, mild as well as severe, underwent the same steady and rapid improvement which commenced immediately after their admission.(a) This is contrary to the definite course pursued by the specific fevers, whereas it harmonizes exactly with a characteristic feature of numerous cases of dysentery we receive from on board ship. The disease in these instances is excited and kept up almost exclusively by the unwholesome diet and bad water supplied to the men; they recover so rapidly, and by such simple means when brought into Hospital, that I believe medicines might often be dispensed with—a few warm baths, a comfortable bed, and suitable diet being sufficient to restore health.

The plan of treatment adopted, and its efficiency in subduing the symptoms, will assist in showing the nature of the disease, and the opinion that was formed at the time the men were admitted. Most of the class included under the first head had nothing besides our "mist. feb.," a weak solution of acetate of ammonia, which I usually prescribe for cases of "febris" and "febricula," and mild pulmonary affections; and not unfrequently when a placebo is required. One or two had quinine (one grain twice a-day), and one had cod-liver oil. Several of them took no medicine after March 1. To those whose pains in the legs were severe, frictions with turpentine liniment were used. The cases of the dysenteric class were treated either with Dover's powder, in five grain doses, or compound kino powder, in ten or twenty grain doses, repeated more or less frequently.

In some of the cases, an occasional small dose of castor oil was given, in addition to the foregoing treatment; and in one, opiate suppositories. In the three cases in Wards 1 and 2, quinine was administered in conjunction with opium. Turpentine fomentations, and in some instances blisters, were applied to the abdomen.

In consequence of the manner in which the diet-lists were made out, I cannot give particulars; but I remember Mr. Pemberton informing me on the admission of these men, that he had put about one half on "House," *i. e.*, "full diet," modified so as to suit their religious scruples; and the others on rice, or arrow-root and milk, *i. c.*, the diet we prescribe in dysentery. Wine was administered freely to the three men in Wards 1 and 2, and to a few of the others, but only in quantities varying from six to eight ounces in the twenty-four hours.

In conclusion, the history of the *Voyageur de la Mer* forms an important commentary on the events arising out of the *Scheah Gehald's* visit to Liverpool, and affords a striking corroboration of the evidence obtained from the Southern Hospital. I need not allude to the condition of the ship, so graphically described in the *Medical Times and Gazette* of April 27, but shall merely refer to the circumstances attending her arrival at Malta and Alexandria. Dr. Edwards, writing from the former place, (*Medical Times and Gazette*, May 4,) states that the Egyptians were not suffering from typhus, although the captain and some of her officers were labouring under that disease. Dr. Ogilvie (*Medical Times and Gazette*, June 1,) states, "that on the arrival of the steamer in Alexandria, some twenty-eight or thereabout of the crew were admitted into the Native Hospital for rheumatism, meningitis, dysentery, and other non-contagious diseases, but not one with typhus or other contagious fever." Whereas, "of seven Englishmen on board, six were affected at the time of landing, or immediately after, with fever, but in different degrees of intensity."

(a) Seventeen were discharged on March 8; six on March 16; after which there remained in Hospital one case of subacute pleurisy, and four cases under Surgical treatment. Of the thirty-two cases, only four died.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

THE TUNBRIDGE WELLS INFIRMARY.

OVARIAN DROPSY—RUPTURE OF THE CYST INTERNALLY—CURE.

(Under the care of Dr. MILNER BARRY.)

Amongst the occurrences which are possible in the course of ovarian dropsy is that of rupture of the cyst. When rupture takes place it may be followed, firstly, by death, either from collapse or peritonitis; secondly, by healing of the rent in the cyst, and re-filling, things being thus restored to *statu quo;* or, lastly, cure may be effected by the absorption of the cyst-contents. That the cure should be permanent it is almost an essential that the cyst should have been unilocular. Unilocular cysts, although often spoken about, are in fact very rare, and it is, therefore, easy to understand that cures of this kind should be very infrequent. For the particulars of the following one we are indebted to Dr. Milner Barry, under whose care the patient was. At the time the rupture occurred, the woman was, unfortunately, not under observation. We give the particulars in Dr. Barry's words:—

"Harriet A., aged 32, a married woman living at Rotherfield, was admitted as an out-patient of the Tunbridge Wells Infirmary on February 10, 1857. She was then labouring under ovarian dropsy, and was as large as a woman in the eighth month of pregnancy. The cyst appeared to be a simple one; the surface was smooth in every part, and the fluctuation very manifest. She had borne five children, the youngest being then three years old. The catamenia were regular in their recurrence every three weeks. She had begun to increase in size about two years before, the swelling commencing above the pubes and to the right side. When she first observed the swelling, she had pain in the region of the right ovary.

"She remained under treatment at the Infirmary for a few weeks without any notable alteration, after which she ceased to attend, and I lost sight of her until May 7, 1861, when she again became my patient at the Infirmary, and gave me the following history of herself:—She continued to increase in size somewhat until Sept., 1857, when she tripped in her wash-house, and fell violently forward on the brick floor, becoming faint from the shock. She felt very ill for some days, but every day became smaller and smaller, and at the end of three weeks she felt as if she had 'shrunk up to nothing.' She could not recollect whether she had passed much water, or whether she had had increased action of the bowels after the accident, but she lost the dropsy and has had no return of it. She has not since been pregnant. The catamenia recur every fortnight in a scanty manner.

"She is at the present date (June, 1860), slight and thin; there is no protuberance of the abdomen, but a vague feeling of fulness over the right ovary. She is now suffering from biliary derangement and enlargement of the liver."

METROPOLITAN FREE HOSPITAL.

OVARIAN DROPSY—OVARIOTOMY—RECOVERY.

(Under the care of Mr. HUTCHINSON.)

In the following case it will be seen that the patient was in every respect in a favourable condition for the performance of ovariotomy. The cyst had never been tapped, and there appeared good reason for believing that no adhesions had formed.

Mrs. B., a healthy woman, was admitted as an out-patient on account of ovarian dropsy in March last. She was the mother of several children, the youngest being three years old. She had first noticed an enlargement of the abdomen about a year ago, and it had steadily increased. Her size was now that of a woman at full term of pregnancy. Partly from the examination of the abdomen, and partly from the woman's statement, that she had never had the least pain in connexion with the tumour, Mr. Hutchinson expressed a confident opinion that no material adhesions existed.

Mrs. B., having been apprised of the nature of her case, of its probable termination if let alone, and of the risks which attended an operation, decided, after some consideration, in favour of the latter alternative, and she was accordingly admitted into the Hospital for that purpose in April.

The operation was performed under chloroform in the presence of Dr. Barnes, Dr. Hughlings Jackson, Dr. Bader, Mr. Chance, and others. The incision of the peritoneum did not exceed three inches. The tumour was tapped in three places, this being necessitated by its multilocular character, and was gently drawn out at the wound as it emptied itself. There were no adhesions whatever to the parietes of the abdomen, but the omentum was firmly united to the cyst over a limited extent. It was not judged safe to detach the omentum at this spot, and a ligature was accordingly applied to it and it was brought out at the wound. The peduncle of the tumour proved to be long and thick; it was temporarily secured by a single ligature, and subsequently (after removal to bed) by two. No bleeding occurred, nor did any of the cyst-contents escape into the peritoneum. The wound was closed by harclip-pins, and a flannel-bandage was applied. The operation had occupied but a very short time, and the patient was removed to bed in an exceedingly satisfactory condition. A two-grain opium suppository was introduced at the time.

No ill symptoms whatever followed, and little or no medicine was given after the first opiate. On the fourth day, however, the patient, from some accidental cause, had a violent fit of retching, during which the central part of the wound gave way and a portion of the omentum was found prolapsed beneath the dressings. The pins had been removed on the day previously, when union appeared to be good. After very carefully washing the extruded portion of omentum and the edges of the laceration, Mr. Hutchinson reduced the former and united the latter by two wire sutures. Small doses of opium were given during the next twenty-four hours, and all did well.

The woman left the Hospital about a month after her admission, being then in excellent health. It is now nearly two months since her discharge, during which period she has been in the regular discharge of her domestic duties. Menstruation has occurred three times since the operation.

THE LONDON HOSPITAL.

LARGE ABDOMINAL TUMOUR—DEATH—ENORMOUS GROWTH OF CANCER FROM THE LIVER.

(Under the care of Dr. FRASER.)

[Reported by Mr. W. B. WOODMAN.]

We give the following case in detail because of its interest as an example of a kind of tumour which not unfrequently leads to much doubt in diagnosis. Its large size, rapid development, painlessness, taken with the existence of a deceptive sense of fluctuation, might easily have led to error as to its true nature. It will be seen that, as is usually the case in these very large cancers, the form of the disease was that known as the alveolar intermixed with the softer kind of the medullary.

Mary R., aged 30, single, a tailoress, was admitted an in-patient November 13, 1860. Her complexion was dark, she was much emaciated, and very anæmic, and had rather an anxious expression of countenance. Her father, who was rheumatic, died about the age of 50—cause unknown. Her mother died about the same age of "turn of life." She had only one brother, who was still living, aged 26, and pretty heathy, as were other members of her family. Menstruated first at the age of 17. Catamenia very regular, though scanty, until nine months ago, when they ceased. She said that she had always been tolerably healthy, until about twelve months ago, when on catching a severe cold, she found great difficulty in breathing—had a cough, with spitting of "thin stuff of a dark colour," but never any blood. She then noticed that her body began to swell, and to be very hard. It increased in size rapidly, and especially during the last three weeks before admission. She does not know at which part of the abdomen the swelling first began. She had no particular pain, but dyspnœa, and occasional palpitation. She said that she had had shivering and vomiting for a few days before she first noticed the tumour.

On admission the whole of the abdomen, from the ensiform cartilage to the pubes, was found occupied by a hard, irregular, and nodulated tumour. It was most prominent just above and again below the navel, having a sulcus, a hand's breadth across the abdomen in a line with the umbilicus. Its hard defined border seemed inferiorly to be parallel to the line of the true pelvic brim a little above it. Superiorly it pressed closely on, and pushed up the diaphragm.

There was no bulging of the ribs. Her girth at the ensiform cartilage was thirty-five inches; at the umbilicus, thirty-seven inches; above and below, midway between ensiform cartilage and navel, and the latter and the pubes, there was about an inch more. There was general dulness on percussion all over the tumour, and an obscure feeling of fluctuation, and impulse when opposite points were percussed. Her bowels were costive, and she had occasional difficulty in passing water. Her tongue was red and raw-looking. Appetite good; pulse 120, feeble; skin hot, moist, and clammy. She sweats profusely at night; coughs occasionally; respirations entirely thoracic,—thirty-six per minute, rather roughened at apices of lungs; and expiratory murmur prolonged. There was a good deal of general emaciation, most marked under the clavicles; no expectoration. Active treatment was, of course, out of the question, although from the history, and the entire absence of pain, the diagnosis of cancer was by no means clear. Warm water enemata, which had been ordered at first as gentle laxatives, gave so much pain, that they were discontinued.

On November 21 she seemed rather better, having less dyspnœa and perspiration. Her urine, which was of the sp. gr. of 1032, contained no albumen, but had a copious precipitate of lithates.

On December 1 there was less dyspnœa. Her abdomen was less tense. Her tongue was clearer, and she had no pain. Her face was, however, still anxious, and she was a little sick towards night. About December 15, the night sweats were again profuse, and she seemed weaker. On December 19, her legs were noticed to be œdematous, and to be rather thickly studded with little purpuric spots. On December 28 dyspnœa became very urgent; she grew rapidly weaker, and died on January 3, 1861, at five p.m.

Autopsy.—The following account is by Dr. Andrew Clark, who had also prepared sketches of the microscopic appearances, which, with a fuller description, were unfortunately lost by him. I am allowed to state, however, that the naked-eye characters of the tumour, etc., were completely confirmed by the microscope. The examination of the body was made twenty-four hours after death. No post-mortem rigidity left. Face extremely livid, and veins gorged. Trunk and upper extremities emaciated. Lower limbs generally œdematous, and about legs and feet studded with purpuric spots. On removing the sternum, the thoracic cavity was found very much diminished by the projection upwards of the diaphragm, the convex border of which corresponded to the space between the third and fourth ribs. The left lung was diminished in volume, and adherent round its base to the diaphragm by means of soft, imperfectly fibrilated lymph. The summit of the lung was deeply

puckered, and its substance corresponding to the puckerings was studded with groups of iron-grey tubercles. In the lower parts of the lung were other groups, similar in character, but larger. At two points two small groups had assumed all the characters of yellow tubercle. The lower lobe was intensely congested, firm, and almost collapsed. About a pint of serum was found in the right pleural cavity. The right lung was slightly adherent at the summit, its apex generally deeply puckered, and fissured by bands of firm fibrous tissue. Corresponding to the puckerings in the lung-substance were groups of tubercles in various stages of development and decay. Some spherical, dense, semi-transparent, and grey; others larger, friable, and yellow; one or two cretaceous. The remaining portions of this lung exhibited no other obvious lesion than extreme congestion and partial collapse. On opening the abdominal cavity the liver was found greatly enlarged. It occupied the whole right front, from the fourth rib downwards to about half an inch below the crest of the ilium on the right side. Beneath the liver, but quite distinct from it, and lying beneath the stomach and transverse colon—which surrounded it like a girdle—lay a very large nodulated tumour, whose upper border was free, and lay in front of the stomach, which it had dragged down to the level of the iliac crest. The lower border was also free, and occupied the cavity of the pelvis, lying rather to the right side. The small intestines lay huddled together on the left side of the tumour in the iliac and lumbar regions. The parietal layer of the peritoneum exhibited numerous rounded nodules at its lower part, and were reflected into pelvis and ilium. These nodules were of a reddish-grey colour, partly sessile, partly pedunculated, and seemingly of similar character to the mass previously described. There was a quantity of yellowish serum in the peritoneal cavity. The liver weighed 14 lbs. 2 oz. Its right lobe was greatly elongated, but of even contour. The left lobe also much elongated, rounded in form, and divided into two unequal portions by a deep furrow. To the upper portion the spleen was adherent (and had become flattened and moulded to the surface against which it had been pressed). From the junction of the right and left lobes, at the anterior part, sprang two rounded, sessile tumours, each about the size of a small hen's egg. The capsular surface was coated with shreds of fibroid tissue, by which it adhered to adjacent parts. On slicing the liver in various directions, it was found to be thickly studded with spheroidal tumours, varying from the size of a pea to that of a child's head, and apparently of two kinds. The first and smaller kind had all the naked-eye characters of encephaloid cancer, as had also the second and larger kind upon its circumference, but the centre of each, which varied in size in different cases, was occupied by a jelly-like mass, yellowish and transparent, loaded with serum, and here and there studded with patches of white, opaque material. In one of these tumours, which occupied the posterior half of the left lobe, and lay adjacent to the spleen, the gelatinous centre had become completely liquefied, so that it represented a cyst, with encephaloid walls of different thickness at different parts. The intervening liver substance was of a reddish slate colour, firm, tough, and exhibiting no other obvious departure from health. The tumour already described as lying between the stomach and the transverse colon weighed, with attached portions of these organs, 5lbs. It was somewhat quadrilateral, its long diameter lying across the spine. It had the appearance of being composed of a number of spheroidal tumours, of various sizes, agglomerated together. On section it exhibited masses resembling, in variety of size and appearance, those found in the liver; but the tumours were firmer, there was less gelatinous material in them. The larger ones had a distinctly alveolar structure, and many of the alveoli were nearly half occupied by what appeared to be extravasated blood. The spleen substance was dense, but healthy. The right kidney healthy-looking, but there were two whitish, broad cicatrices on the lower part of the capsular surface. Irregular granular calculi lay in the calices. The left kidney similar. Pancreas healthy. Mesenteric glands enlarged, some calcareous. Mesentery thickly studded with tumours of various size, from that of a pin's head to that of a walnut. Some of these were flat, sessile, and looked like drops of wax. Others were spheroidal, reddish-black, and tolerably firm. Many were opened, and exhibited an encephaloid appearance, but no gelatinous matter. Ovaries and uterus healthy. Other organs not examined.

CASES OF DISEASE OF THE SUPRA-RENAL CAPSULES.

CASE OF BRONZED SKIN, WITH DISORGANIZATION OF BOTH SUPRA-RENAL CAPSULES.

(Under the care of Dr. SEATON REID.)

For the particulars of the following case we are indebted to Dr. Seaton Reid, under whose care the patient was, and by whom the following narrative was read before the Belfast Clinical and Pathological Society (a).

A female, aged 28, came under treatment in the month of July last, complaining of great weakness and debility, associated with nausea, but without vomiting. My attention was arrested at my first interview by the peculiarity of her colour, and the extreme languor and listlessness with which she was affected; and believing that for the first time I had before me an example of Addison's disease, I took some pains in ascertaining the following facts:—She stated she had always been "weakly," and although able, and indeed obliged to perform household work for her support, she was conscious that she never possessed the capability of endurance enjoyed by others. For the last two years she had suffered from a short dry cough, with pain in the left side of the chest, but there never had been any bloody expectoration or hectic. There was dulness on percussion below the left clavicle, with bronchial breathing and prolonged expiratory murmur, but no crepitation. At the base of the left lung a muco-crepitating ralle was heard.

The respirations were about 24. Her pulse was regular, very feeble, and about 110 in the minute. Both sounds of the heart were distinct, and unaccompanied by murmur. Careful examination between the intercostal spaces failed to detect any impulse. The tongue was moist, and presented, with the buccal and labial mucous membrane, an unusual appearance to be mentioned subsequently. She had much thirst; passed a sufficient amount of urine, of a sp. gr. of 1016, and free from albumen. Her appetite was very bad. The bowels acted regularly; were rather disposed to be constipated. She had never suffered from piles, nor was any enlargement of the liver to be detected. The catamenia had been always natural in time until the last period, and they had never been too profuse. Six years ago she gave birth to a child, which had since died. Her pupils were equal, and of medium size. The expression of her eyes was languid, although the conjunctivæ were clear. She had no headache, or aching or weakness in her back, but she was often very weak and disposed to faint, and was almost never free from a "sinking feeling" at the epigastrium, all of which sensations were increased when she assumed the erect position.

She and her friends were certain that her skin was natural in colour, and her face ruddy, till about three or four months ago. Since then they all observed that the skin on her face, then on her hands, and lastly on the trunk of the body, became gradually darker, until it was now found in the following state. The face was of a yellowish brown colour, and not any lighter under the front hair, which it would be had it depended on the action of the sun. It was darker under the eyelids, and a number of spots of a very dark olive were scattered over the cheeks. The lips were pale, and there was a dark streak along their centre like sordes, but it could not be washed off. When the tongue was protruded it was quite clean and moist, but at its tip there were two or three bluish streaks, as if a drop of ink had been rubbed lightly over it with the point of the finger. This also could not be removed by washing, and a similar discoloration was found on both the labial and buccal mucous membrane. The back and sides of the neck were of an olive brown colour, and a similar discoloration existed over the back and arms to below the elbows, and the outsides of the arms were markedly paler than the insides. The breasts, especially about the nipples and the folds between their pendulous portions and the trunk, were of a still darker colour, as was also the case with the arm-pits. The lower portion of the hips, upper portion of the thighs, and the lower part of the abdomen were, in fact, as dark as the skin of a mulatto. About midway below the knees and the elbows the dark olive brown gradually shaded into the yellow-brown colour which

(a) The case has been published in the "Transactions" of that Society.

existed in the face. Over the cheeks and lower part of the abdomen and upper portions of the thighs there were a number of spots of a still darker colour than the darkest shade on any other portion of the body. The only exception to a change of colour in the entire skin of the body existed in the soles of the feet and the palms of the hands, which, with the tissue underneath the nails, was little, if at all, affected. Indeed, the latter still retained its pinkish hue.

It is not without interest to notice, that whilst the parts of the body in which the colour was first changed were those exposed to the light, yet, towards the close of life, the darkest portions, with the exception of the spots on the face, were those that were most protected by clothing from its action, such as the arm-pits, the hips, and the front of the abdomen below the umbilicus. There was one symptom observed in this patient that I am not aware has been noticed in any other; namely, the bluish streaks on the tongue.

I have now to mention the changes that took place before she died. She continued in the same listless and depressed state, and never spoke, unless in reply to questions or when asking for something. She frequently required aperient medicine, and the evacuations from the bowels were yellow, except when darkened by iron taken as medicine. During the last week vomiting occurred almost daily, of a yellow or greenish fluid; and two days before she died her eyes became injected. On the day of her death she asked to be raised up, appeared to faint, and died quietly, without exhibiting on that, or indeed on any other occasion, any nervous symptoms.

I have to regret that I was unable to obtain that minute and searching examination of every portion of the body which Dr. Murney, with his usual kindness, had promised to institute in this (to me, at least) very interesting case. Indeed, circumstances rendered it impossible for me to obtain more than an examination of the lungs, kidneys, and supra-renal capsules. The left lung had a considerable deposit of tubercle at its apex, without any cavities. Both supra-renal capsules had their shape and structure entirely destroyed. The left capsule measured 2 inches in length, 1 inch in breadth, and ½ an inch in thickness, and its shape was oblong. The right was 2 inches in length, 1¾ inches in breadth, and ¾ of an inch in thickness, and its shape was nearer a square. A healthy capsule is about 1¾ inches in length, 1¼ inches in breadth, and 3 lines in thickness. The right appears to be composed of two firm plates, joined at the edges by an elastic material. The cavity thus formed appears filled up with a cheesy or scrofulous-looking matter, which may be seen protruding through an opening made accidentally when clearing off superfluous matter. The left capsule has a more elastic or leathery feel, and has much the appearance of hard, fatty matter, but without any cavity in its substance.

No examination of any other organs of the body was made, and consequently I am unable to state anything respecting the condition of the heart and other viscera, except what has already been mentioned about tubercular deposit in the left lung. It is, however, evident, from the state in which the supra-renal capsules were found in this patient, that the natural structure of *both* was entirely destroyed; and when we find this accompanied with the peculiar discoloration and intense state of cachexia and debility described by Dr. Addison, I confess that I cannot divest my mind of the impression that in this case they bear towards each other the relation of cause and effect. I had never seen before a case of Addison's disease; but there was something so peculiar in the colour and expression of this patient, that when I ascertained her history I pronounced her, at my first interview, to be suffering under *Morbus Addisonii*.

TWO CASES OF DISEASE OF THE SUPRA-RENAL CAPSULES.

The two following cases are communicated by Mr. E. W. Valentine, of Somerton:—

Case 1.—W. M., aged 35, by trade a mason, of slight build, and sallow complexion. He had always had good health until the close of the year 1857, when he first came under my notice. He then complained of considerable pain in the back, between the lower dorsal and upper lumbar vertebræ. This was accompanied by partial loss of power of the lower extremities. He was cupped and blistered, and hydragyrum cum cretâ, with Dover's powder, was given every four hours. The mercury was not continued sufficiently long to affect the system, as the symptoms abated, and he was soon able to resume his usual work.

In March, 1858, he again applied to me, complaining of general debility, loss of appetite, and depression of spirits. It was at this time that the darkness of his complexion first attracted my notice, especially that of the forehead close to the hair, which part was completely protected from the sun by his cap. There was a sallowness over the whole body; but the parts more especially discoloured, were the face, neck, and arms. This bronzing of the skin suggested that he was suffering from disease of the supra-renal capsules. He had at intervals pain in the epigastric region, which was very intense, attended with frequent vomiting. From the administration of steel, combined with tonics and opium, and the use of sinapisms, he derived some partial relief, so that he was enabled to resume his work for a short time; but in consequence of excessive debility and languor, he soon became totally incapacitated. From this time he gradually succumbed to the disease, his face becoming of such a dark hue, that he might well have been taken for a man of colour. In the epigastrium, where mustard plasters had been frequently applied, the skin was of a particularly dark colour.

Three days before death took place he was able to walk out, but complained of intense pain at the pit of the stomach, which was not constant. I saw him on the night previous to his decease; he was then suffering very much; his pulse was weak and quick. I prescribed half-a-grain of the acetate of morphia, to be repeated in three hours if he was not relieved. After the second dose he soon went to sleep; but died at half-past five on the following morning.

Post-mortem, Thirty-six Hours after Death.—Rigor mortis present; body emaciated; skin peculiarly dark. There was a fair amount of fat on the walls of the abdomen. The right supra-renal capsule was wasted; the left much enlarged. The remaining abdominal viscera were healthy, with the exception of slight enlargement of the mesenteric glands. The chest was not examined, as he had never had any symptoms of pulmonary disease. For the following observations on the condition of the supra-renal capsules, I am indebted to Dr. Wilks, to whom I sent them:—"Both capsules are affected in a manner almost peculiar to this organ. I can find no trace of healthy structure, but in its place a greyish, amorphous, lardaceous matter, of the consistence of wax, which exactly resembles numerous other specimens in the Guy's Museum."

Case 2.—W. P., aged 30, a marine-store dealer, had always enjoyed good health until about June, 1860, when he discovered that he was gradually losing flesh and strength. He continued to follow his occupation until August last, on the 7th of which month he first came under my care. I found him extremely prostrated, suffering from great irritability of the stomach, acute pain in the lower part of the back, and loss of appetite. The skin of his face and body was of a dark, dusky hue; the pigment was not deposited in patches, as I have observed in some cases, but equally diffused, and having a deep bronzed appearance. As he had always a sallow complexion, I thought his symptoms might possibly have arisen from a disordered stomach, and gave him a gentle emetic, and afterwards quinine. On the 9th I again saw him; the irritability of the stomach still continued, attended with distressing weakness. It then occurred to me that he was a victim to disease of the supra-renal capsules, and that the sickness was only caused by sympathy. I tried several remedies to relieve the sickness, but without any permanent success. It continued, together with great pain in the back, until his death, on September 22.

I made a post-mortem on the 24th. The body was much emaciated, the whole surface being very dark. Every organ was perfectly healthy, with the exception of the supra-renal bodies, which were wholly disorganised. Their normal structure was destroyed, and its place occupied by a scrofulous deposit in a softening condition. The head was not examined.

CHLORATE OF POTASH IN VARIOLA.—Dr. Read refers to several cases of small-pox that had occurred in his practice, in which he found the employment of chlorate of potash attended with marked benefit, especially for the relief or prevention of suffocative symptoms.—*American Medical Times*, No. 25.

Medical Times and Gazette.

SATURDAY, JULY 13.

UNIVERSITIES AND CORPORATIONS.

It is a well-recognised common-sense principle in daily life, that the same man ought not to be Treasurer and Auditor; that the man who furnishes goods ought not to be the man who examines their quality; the architect must be a different functionary from the builder; in short that, taking human frailty as it exists, the system of *check*, by which B shall be employed to report on the proceedings of A, is the best that can be devised to secure the efficient and honest working of any branch of business or administration, public or private. Education, be it vulgar or professional, offers no exception. A man who is engaged in the work of education ought to be willing to submit his pupils to a fair examination at the hands of impartial and disinterested persons. His own character may be as high as possible; and the higher it be, the more willing he will probably be to submit to, or even to seek, a searching scrutiny into the value of his work. This is just the manner in which Medical Universities, which are Educating Bodies, and Medical Corporations, not to be rivals in the sale of licences, but which are Examining Bodies, might have been expected to co-operate, if the public welfare ever could have been made superior to considerations of private interest. And this is the view which is, altogether unconsciously, we may say ludicrously, ignored by Dr. Christison, in a lecture delivered to the Medical students of the University of Edinburgh in April last, and now published for the benefit of universal humanity. Never was a native vein of broad common-sense more obscured by narrow provincial prejudice, than in this address of Dr. Christison's. So far as he descants upon the early and honourable origin of Universities in general, and of that of Edinburgh in particular, and their services in the cause of liberty and civilisation, well; but it is when he comes to the practical part of the question—the actual supply of men fit to serve their fellow-creatures—that he breaks down. His desire is to show that a University has the indefeasible right to grant any degree in any Faculty, which no one need deny; for it is the function of a University so to do. But when he comes to the *value* of the degree, whether it ought of necessity to pass unchallenged, and then to show that a degree ought to secure for the holder of it the universal right to practise, he ventures on far other ground. He is obliged to confess, in spite of himself, that in the case of the earliest University which acquired formal and legal rights of granting degrees,—that of Salerno—the State, or Government, or in other words society at large speaking through the mouth of the highest constituted authority, claimed and exercised a check upon the power to practise. The degree was a titular honour conferred by the University; the licence to practise a right which the State reserved to itself, in order to make sure that degrees were not granted corruptly or unworthily. "No one," says the King, "pretending to the title of Physician shall practise or cure, unless, first approved at Salerno by a decision of magistri at a public sitting, he shall present himself with letters, testimonial as to his trustworthiness and sufficient skill from the magistri as well as our officials, before ourselves, or in case of our absence from the realm, before our vicegerent, and receive from us or him a licence to practise."

Having thus, whilst endeavouring to prove the contrary, hown that there is nothing in the original constitution of a University, any more than in the nature of things, which creates the absolute right he contends for, eandour obliges him to show that the privileges of Scottish Universities have not always been employed for the public good. He is even obliged to confess the short-comings of the University of Edinburgh "at the close of the first quarter of the present century." The *Senatus* showed "a blamcable slowness to add a rising branch of Medical study to the curriculum for graduation," and compelled one of the Professors to appeal to the Town Council. The "academie spirit" of the Senate was exhausted in litigation. "Misrule and unfitness on the part of the then heads of the University" were exposed. The Examining Boards of Scottish Universities were charged with laxity, systematic or occasional; "from the latter of which charges," says Professor Christison, "even that of Edinburgh had not been wholly exempt." Thus does Professor Christison show, spite of himself, that English society was justified in being doubtful of the value of the Scottish Doctorate conferred at twenty-one, on youths whose general education was not of the highest order. The usefulness of Corporations, or of some equivalent bodies, for the purpose of testing the value of the education conferred by the University, or other educating body, is proved by Dr. Christison's own words.

He seems to forget that it is not in accordance with sound principle to give exclusive privileges to any eompeting body. If of two well-organised Medical Schools, equal in all other respects, one has the right to confer a title with certain legal privileges, it thereby acquires a monopoly which gives it unfair advantages. When University College in Gower-street was first established, it assumed, as is well known, the title of "University of London," and then desired to possess the privilege of granting degrees, which privilege was refused, on the plea of unfairness to the other schools. Either the Borough or St. Bartholomew's is quite as well qualified to turn out Doctors of Medieine at twenty-one, as is the University of Edinburgh.

But of all the narrow-minded outcries, which we are sorry to see endorsed in Professor Christison's pamphlet, none is more unfounded than that raised against the Apothecaries' Society of London. The English public demanded guarantees of competency to practise, in order to protect themselves, and accepted the Apothecaries' licence as such guarantee; and if Scottish University Doctors came to compete in the same field as English Apothecaries, they may have been well content to put up with the examination and the fee of six guineas in return for the privileges they obtained, and in order that the system of Professional checks and guarantees against illegal Practitioners should be maintained for the public benefit. Considering that it is known to be a fact, that Edinburgh Graduates have been contemptuously *plucked* at Apothecaries' Hall, because when claiming exemption from a classical examination they were asked to construe their own diploma and could not—(one such person, as we are credibly informed, when asked the meaning of the words *Jacobi Sexti*, which occur in the diploma, could not tell what they meant)—we think that the authorities of the Scottish Universities are the last persons who ought to rail against "corporations," or to object to a double and "*checking*" system of examination, which their own confession shows to be no unnecessary protection to the English public.

ALLEGED CRIMINAL ABORTION.

The extract from the *Times* which follows will put our readers in possession of the particulars of a charge made against Mr. William Randall Mackley, Surgeon, of Great Horton, near Bradford, Yorkshire; and we are compelled by

the interests of the Profession to make some comments on the accusation against him, of having wilfully given a false certificate, for if Mr. Mackley is to be severely handled on the plea that he has given an untrue certificate of death, coupled with insinuations of darker misdoings, other men may also suffer through certificates, even without any other misdoing being imputed to them. Let us observe, then, that the death certificate is a document contributed for the benefit of the public service by members of the Medical Profession gratuitously. In very many cases such documents must be signed on second-hand information. For example, it happens repeatedly in the case of persons affected with chronic illness, and who are not seen daily by the Medical attendant, that a relative or friend calls with the story, "Please, Sir, I want a certificate for my poor relative, who died yesterday." The certificate is given, for the Medical attendant takes the death for granted; but the fact remains that he certifies to a thing which he does not know personally to be a fact, although it be in the highest degree probable. The patient may have been smothered or may be alive for aught he can be certain of. In the second place, many certificates—we should scandalise some persons were we to say how many—are unavoidably filled up conjecturally; and it would be rather hard upon Medical men if they were liable to get into trouble because of a confusion between enteritis and peritonitis. Thirdly, if it be a criminal act to conceal the fact that parturition or abortion preceded death, and formed, in fact, one link in the chain of causes which led to death, then other persons besides Mr. Mackley are criminals. We do not hesitate to say that there is a universal and natural tendency to concealment of matters which might be prejudicial to the Medical attendant. For example, a woman is confined on the 25th, and dies on the 27th. The cause of death is certified as *scarlet fever*. But can there be a doubt that the omission of so grave a fact as parturition is the omission of that which rendered the scarlet fever fatal, and was, in fact, the effective cause of death? Is such an omission penal? As for the alleged mistake in the date we say nothing, nor do we wish to prejudge any case. We will only observe that single Medical men should always send for a neighbour when their female domestics are ill.

"Committal of a Surgeon at Bradford.—At the Bradford Court-house on Monday Mr. William Randall Mackley, Surgeon, of Great Horton, was charged before the borough magistrates with having wilfully made and uttered a false certificate of the cause of the death of Martha Curtis, his housekeeper, who died at his house on the morning of the 26th ult. under circumstances of suspicion, which have been already stated in the *Times*. Mr. Mossman, solicitor, conducted the case for the prosecution, and Mr. Wheelhouse, barrister, of Leeds, appeared for the defence. Various witnesses were examined as to the illness and death of Martha Curtis, her burial in the Wesleyan Chapel graveyard at Wilsden on the 28th ult., and the disinterment and surgical examination of her body on the 2nd inst. These witnesses included the father, mother, and a sister of the deceased, and some women, neighbours of the prisoner. There was nothing to show that, as her Medical attendant, the conduct of the prisoner had been otherwise than kind and attentive. The mother of the deceased, who was with her several hours before she died, stated that she never made any complaint against her master. It appeared that the body was removed from the prisoner's house for burial in the dead of the night after she died, but that this was done at the desire of her parents and other friends. The following certificate, which the prisoner gave to the deceased's father, was put in evidence: —'I hereby certify that I attended Martha Curtis, aged 33 years last birthday; that I last saw her on June 23, 1861; that she died on June 23, at Great Horton, and that the cause of her death was enteritis. Time from attack till death four days.—W. R. Mackley, Surgeon. Great Horton, June 24.' A leather portmanteau, found by the police in a garret above the deceased's bed-room in the prisoner's house was produced. It had 'W. R. Mackley, Esq., Medical Staff,' inscribed on the outside, and contained a night-dress, pair of drawers, and other articles, which were identified as having belonged to the late Martha Curtis. These articles were covered with blood. In the same portmanteau were some shirts belonging to the prisoner. Mr. J. N. Terry and Mr. William Parkinson, Surgeons, of Bradford, gave evidence to the effect that the stains on these clothes indicated that they had been used about a person who had been recently confined, or who had suffered from abortion. They deposed to a post-mortem examination of the body of the deceased having been made, that the cause of death was peritonitis, and that deceased had been delivered of a child four or five days previous to her death. Enteritis, in their opinion, was not a true statement of the cause of death, according to the appearances on the post-mortem examination. They admitted in cross-examination that, supposing the prisoner not to have known that the deceased had had a child, he might have mistaken peritonitis for enteritis. For the defence Mr. Wheelhouse called Dr. W. Macturk, of Bradford, who stated that if the disease progressed to death, whether it commenced with enteritis or peritonitis, the one would pass into the other both ways. He did not think it possible for a person to die of either disease without both being present. He should not blame any one for giving this certificate. Some evidence was given for the defence, as to the deceased having suffered from a stomach complaint and constipation."

At the moment of going to press we receive a report of the inquest held on Tuesday, and we are sorry to be obliged to add that it resulted in the verdict,

"'That the deceased, Martha Curtis, died from the effects of the means which Mr. William Randall Mackley used to procure abortion.'

"The Coroner: That amounts, gentlemen, to a verdict of 'Wilful Murder' against William Randall Mackley.

"Mr. Grauham, the chief constable of Bradford, took the accused into custody about midnight on Tuesday, on the authority of the Coroner's warrant."

This was the natural result of the evidence of Mr. James Field, Surgeon, of Dudley-hill, near Bradford. The report is thus given in the *Times*:—

"I am acquainted with Mr. W. R. Mackley, Surgeon, of Great Horton, whom I have known about sixteen years. We were Medical pupils together. On Monday, the 17th of June, he called at my house at Dudley-hill, about half-past eleven o'clock in the forenoon. He was on horseback, on his way to Gomersal. He promised to return and get some dinner with me. He returned about one o'clock. He seemed to be rather more nervous and fidgety than usual. We had a conversation before, at, and after dinner, in the course of which he asked me if I had ever procured abortion. I said, 'At what time?' He replied, 'About the sixth month.' I said, 'Never.' He said, 'Well, I am in a devil of a fix.' I said, 'What about?' He replied that he had a young woman in the family-way, about six months gone, and he had used every means in his power to cause abortion. I asked him by what means. He said he had used sponge tents, or plugs of sponge, to the os uteri, or mouth of the womb; that he had tried everything; that he had used the stilette, which is an instrument invented to procure abortion. It is a case containing a lancet, which, when the case is inserted, projects by touching a spring. He said he had even used a strong pointed wire, and explained, by measuring on his arm, that he had introduced the wire into the os uteri to the extent of eight inches. He said he thought the wire must have entered the child's head. I said 'God bless you, man, you'll kill the woman, and then it will be all up with you.' I told him I thought he had better let me look at her, for she, perhaps, might not be in that condition at all. He replied, 'If I do not know, who should?' He asked me if I had any book on midwifery. I showed him two works, but on seeing that they contained no plates he did not peruse them. I think that was about the sum and substance of our conversation. I have not seen him since. He gave me to understand that he was the father of the child himself. He said he had a young woman in the family-way. He never mentioned where she was, and I could not come to any conclusion on that matter. I concluded, from the conversation, that he had been using the means described about the time of our inter-

view on the 17th ult. I knew of no connexion between Martha Curtis and Mr. W. R. Mackley before that interview, and never heard her name before I received Mr. Anderson's letter. I believe Mr. Mackley, sen., has that letter. I have never seen it since he was at my house on Friday last. I have no ill feeling against Mr. W. R. Mackley—quite the reverse."

There are several points here worthy of notice; but we must defer all further comment until after the trial.

THE WEEK.

Some rather remarkable revelations were made in Sir Cresswell Cresswell's Court the other day, respecting a Dr. David Griffith Jones. We may give Dr. Jones's evidence, and let it speak for itself—

Dr. David Griffiths Jones, the plaintiff, of 43, Woburn-place, said he was M.D. of Marischal College, Aberdeen, and M.R.C.S., and had a large practice as a homœopathist. Some years ago he had become acquainted with Mrs. Bellis, who passed by the name of Mrs. Capel. On the 11th of February last he received a note from Mrs. Calvert, the landlady of a boarding house at 31, Fitzroy-square, stating that Mrs. Capel, a lodger in her house, who was believed to be in a dying state, was very anxious to see him immediately, as she had something on her mind which she wished to communicate to him. He sent his wife to her immediately, and went himself between four and five o'clock. Mrs. Calvert wished that she should be removed from the house. He saw her alone, and she shook him heartily by the hand, and said, "God bless you, my dear doctor, how are you? I am very ill; my two doctors have given me up for dead, and I have not a friend in the world nor any person to lean upon in my dying hour." He said she must surely have some friends. She said, "No, doctor, not a friend. All that I have known have robbed and swindled me. I was very glad to see your good wife, and now, doctor, as a Christian and a friend, will you take compassion on me, and remove me from this house? I really cannot die here." The witness then described a long conversation, in which the deceased earnestly pressed him to remove her to his house, and he at last consented to do so. She said she would rather die on the road or on the doorsteps, than remain where she was. She described her property to him, and said, "I shall leave you everything I have, and you must make my will at once." He said he could not make her will, but he would send for her solicitor. She said she hated the very name of solicitor, and asked if he knew a lawyer. He wrote from her dictation an account of her property, and then left her. On the evening of the same day (Monday) he called again and saw her. He went the next day, and found she had passed a bad night, and could not be removed. She refused to allow another Medical man to be sent for. She desired to see his solicitor, and he sent for Mr. Fitch. The next morning she again urged him to remove her, and about twelve o'clock he and Mrs. Jones fetched her away. She was carried down stairs in an arm-chair, and assisted into his carriage. Two gentlemen who were with him, and a cabman, helped to remove her. When she arrived at his house in Woburn-place, she said, "Thank God, I am here." After she had had dinner she asked to see his solicitor. Mr. Fitch came about two o'clock, and she told him she wanted to make her will. Mr. Fitch said, "The Doctor and Mrs. Jones must leave the room." Mrs. Bellis said, "No, no; let them stay. I am going to leave my property to the Doctor; there is no secret in it." They left the room, and she gave her instructions for the will to Mr. Fitch. She went to bed and a nurse sat up with her. He was knocked up in the middle of the night by the nurse, who said that Mrs. Bellis was not well. He and Mrs. Jones went down to her. She was very feeble, and complained of great pain. She took some soup and wine, and revived. A gentleman named Hutherance, who was staying at the house was also in the room. She did not wish another Medical man to be sent for, but, at Mr. Hutherance's suggestion, he sent the nurse to fetch Dr. Murphy. He felt her pulse, and told her she was certainly weaker. She asked whether she was going to die. He said he hoped she would soon rally. She said she wanted to finish her will, and asked him to fetch it. He gave it to her. Mr. Hutherance began to read over the will to her, but she stopped him and said she knew very well what was in it. He explained the contents to her. The will was placed in her hands, and she sat up in the bed and proceeded to sign it. She made a blot on the paper, and Mr. Hutherance took it and scratched it out. It was placed on her knees again, and she signed it. She said, "Doctor, I am trembling; pray assist me." He put his arm round her wrist, and guided her hand while she signed. He said he thought her name was Isabella. She said, "No, it is Sophia." The attesting witnesses were his man-servant Proctor and Mr. Hutherance. She gave him the will. She then called over Mrs Jones and said, "God bless you; I shall never forget your kindness; the Lord will reward you for it." Dr. Murphy saw her about half an hour afterwards. She died in a fainting state between two and three on the same morning. He never prescribed for her, because she did not believe in homœopathy.

Cross-examined by the Queen's Advocate: I have practised homœopathy and also hydropathy for nine or ten years. I combine the two systems. By hydropathy I mean hot and cold water treatment, diet, and exercise. I was originally bred an allopathist. I know a medicine called, not the "astramancax," but the "axtramankaz." (Laughter.) I don't know at all what the word means. I bought the recipe from which I make the axtramankaz from an old Dutchman, in London, whose name I forget. It is a farinaceous substance, a substitute for cod liver oil. It may be made of cereals, rice, and other compounds. There is a common vegetable produce in it. What it is is my secret. I had an establishment for its sale at 449, New Oxford-street. I had an assistant there, Mr. George, who brought an action against me. The sale went on in New Oxford-street until 1857, when the establishment closed. The commodity is still sold at any wholesale chemist's. I took out a patent for it, but I forget when. I took my degree at Aberdeen, in April, 1853. The Dutchman's recipe was not written in Latin or in Dutch (laughter), but English. I have lectured on hydropathy and homœopathy at various halls in London and in the country. In April, 1853, I was lecturing at Chipping Norton. These two advertisements in Chipping Norton newspapers refer to my lectures. I lectured twice in the town-hall, and I passed the two nights after the lectures at the house of a friend in Chipping Norton. I left the next day and went direct to Aberdeen. I slept at Chipping Norton on April 13, and on the afternoon of the 14th I started for Aberdeen. I arrived at Aberdeen early on the morning of the 15th. The train was about ten hours going to Aberdeen. (Laughter.) It was a fast train.

Sir C. Cresswell: I should think so.

Witness: I arrived at Aberdeen at daybreak. I went to the Railway Hotel and slept till about ten o'clock. I then walked to Marischal College. I was about a quarter of an hour going, and I don't remember which way I went. I have never been to Aberdeen before or since. I saw the Secretary, Dr. MacRobin, and told him I had come to take my degree. An appointment was made for the afternoon of the 16th, the next day. I slept at the Railway Hotel that night. There was a misunderstanding between a Medical man named Reeves and myself. It was not a misunderstanding, but an understanding. Perhaps we did what we ought not to have done. It is a matter I should not like to speak about.

Sir C. Cresswell: Very likely; people often do what is wrong, and don't like it spoken of, but you must tell us what it was. Were you examined for your degree at Aberdeen?

Witness: I would rather say nothing about it. I have sworn that I was examined, and that is the truth.

The Queen's Advocate showed the witness a number of examination papers, dated April 14, 1853, and asked him whether the signatures to them, "D. G. Jones" were in his handwriting.

The witness said they were not. They might be in Reeves's handwriting.

Sir C. Cresswell: Was the understanding between you and Reeves that he should represent you at the examination?

Witness: That is what we used to do for one another. We used to represent one another. I represented him at Dublin. I was led into it by Reeves.

Sir C. Cresswell: Did you go to Aberdeen at all?

Witness: I did not.

Sir C. Cresswell: Then, how can you expect the jury to believe a word you have sworn?

The Doctor was described in the papers as having been employed in a Medical capacity on the Staff of the Russian army.

In answer to further questions he admitted that he had never been in the Russian service.

The jury intimated that it would be useless to proceed with the examination, as the witness was quite unworthy of credit.

The verdict was accordingly entered for the defendant, and His Lordship pronounced against the will, and condemned the plaintiff in costs.

The American Medical Association, an important body, which has done so much to maintain a high tone of Professional feeling, to discountenance irregular practice, and to improve Medical education throughout the United States, is threatened with disruption. In the first place, its annual meetings, which have been hitherto held by turns in the chief towns of the Union, are for the present discontinued; and now one of its branches, the Georgia Medical Association, has unanimously determined to separate itself from the parent stem. It appeals to the "sister States of the Confederate States of America," to join with it in "the formation of a new Professional organisation for the South, upon the same broad and generous principles which we have ever been disposed to honour and maintain, and which shall still continue to meet our warm approval and hearty concurrence." This resolution, taken by grave Professional men, and not mere political partizans, speaks loudly for the hopelessness with which any reconciliation is looked for, or even desired, in the South.

On July 4, the Fellows of the Royal College of Surgeons met at the Freemasons' Tavern to eat their annual dinner, and discuss the hard-fought election in the morning. The chair was filled by Mr. Charles Mayo, Senior Surgeon to the Winchester Hospital, and, if we heard rightly, a distant relative of the President of the Royal College of Physicians. The assemblage was a merry one; the only source of regret being that some of the speeches were almost inaudible. It is one great advantage of such meetings that they make the Londoners acquainted with many of their provincial brethren whose attainments and power of work are well worth notice. The Chairman, for example, a good-looking country gentleman, has been Surgeon to his Hospital for half-a-century, and has cultivated operative surgery and midwifery with great success, amidst the incessant toils of a country general practice. Such men, riding or driving over the bleak Hampshire downs, lead very different lives from those of the London "pure;" but probably not less happy nor less useful.

Three men entered into a sewer in Southwark, in order to steal the tallow which escaped into them during the late fire. They struck a light as soon as they got into the sewer, and were disagreeably surprised at an explosion, which scorched them severely. At any rate, the sewer gases when burned are forced into nearly harmless combinations, and it might be advantageous to drain them off systematically and burn them.

The question of the origin of man and his alleged relationship to the apes is exhaustively treated in the current number of the *Westminster Review*, where our readers will find a full account of the controversies between Professors Owen, Huxley, and others on the relative development of the posterior cerebral lobes and lesser hippocampi, and of the discoveries of skulls of a low type which approximate more nearly to the ape than do even those of the African or Polynesian savage. But the writer winds up by confessing that the immensely higher cerebral development of man and the gift of speech render the genesis of man a mystery which Science is at present unable to penetrate.

The present number of the *British and Foreign Quarterly* contains the conclusion of previous articles on the "History of Medicine in Spain," an excellent article on Quarantine, in which the destructive and wasteful character of existing quarantine regulations is described; a very good account of the latest Theories of Syphilis, throwing considerable light on the syphilis of the sixteenth century, and good articles on Cretinism, Emboli, and Nutrition. The subject of embolism deserves more attention than it has yet received in this country. It probably contains the germ of the explanation of multiple inflammations. Cohn's work on the subject would be a good one for the New Sydenham Society.

Dr. Wybrants, of Shepton Mallett, is candidate for the office of Coroner for Somersetshire. We had occasion to notice his exertions in our last volume (*Medical Times and Gazette*, 1861, Vol. i. p. 309) respecting the case of a convict, alleged to be unjustly charged with misconduct to a child, and we shall be glad to see another member of our Profession promoted to that important office.

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Royal College of Physicians, London.

MINUTES OF THE GENERAL COMMITTEE ON EDUCATION.

MONDAY, JULY 1, 1861.

The PRESIDENT took the Chair.

THE Council resolved not to adopt the following Resolutions, proposed in the Report of the Sub-Committee on the Visitation of Examinations (see Minutes of Committee on Education, for June 21, 1860), viz.:—

"1. The Council resolve that, as the Medical Act leaves to the Council the alternative of fulfilling the important duty of Visitation of the Examinations of the various Licensing Bodies, either personally or by deputy, it is their opinion that it would be more efficiently and satisfactorily accomplished by deputy than by the Members of the Council.

"2. That the Council endeavour, for the present year at least, to try how far the work can be satisfactorily accomplished by an Inspector of Examinations.

"3. That it be remitted to the Executive Committee to appoint a suitable person as Inspector for one year, and to pay him such salary, not exceeding , as they may think right, and such reasonable travelling expenses as they may from time to time allow.

"4. That the Inspector so appointed keep a regular report of his proceedings from day to day; and visit once at least in each year, or more frequently if required to do so by any of the Branch Councils, at times not previously intimated to the Body whose Examination he proposes to attend, the Examination of each Body in Schedule (A), and report on the proceedings of such Body to the Branch Council of that division of the United Kingdom, in which the Examining Body is situated.

"5. That such reports be annually laid before the Council, and at all times be open to the inspection of any Member of the Council.

"6. That the Council direct their Registrar to require, by authority of the Council, from each Examining Body, a statement of the times fixed for Examination; and to require from all Bodies who have no fixed times for Examination, to give, if practicable, at least seven days before any Examination is to be held, a notification of the time and place when and where any such Examination is to be held."

1. Moved by Mr. SYME, and seconded by Dr. APJOHN—That the Resolution No. 7 be omitted, viz. "That in the

*

event of a Candidate at any Examination being rejected, his name shall be communicated confidentially to the Registrar of every other Examining Body without delay."

Amendment moved by Mr. ARNOTT, and seconded by Mr. TEALE—That it be recommended to all the Examining Boards that they shall require from every Candidate for Examination before them a statement, signed by himself, whether he has, or has not, been rejected within three months by any of the Examining Boards included in Schedule (A) of the Medical Act.—Amendment carried.

2. Moved by Dr. STOKES, seconded by Dr. ADJOHN—That the Registrar be directed to communicate with the several Colleges and Bodies mentioned in Schedule (A) of the Medical Act, with the view of ascertaining whether they have taken any steps to determine how far the Certificates given to Students for attendance on Hospitals or Lectures are granted on *bonâ fide* attendance.—Agreed to.

Confirmed—JOSEPH HENRY GREEN.

MINUTES OF THE GENERAL COMMITTEE ON EDUCATION.
TUESDAY, JULY 2, 1861.

The PRESIDENT took the Chair.

The Minutes of the last meeting of the Committee were confirmed.

1. Moved by Dr. ANDREW WOOD, seconded by Dr. EMBLETON—That the Committee proceed to re-consider the matters contained in the report of the Education Committee of Session 1860.—Agreed to.

2. Moved by Dr. STORRAR, seconded by Dr. ACLAND—That in reference to Sect. 1 of the Minutes relating to General Education and Examination, the Council are of opinion that the time of commencing professional studies shall be dated subsequently to the passing the Preliminary Examination in General Education.—The further consideration of this motion was adjourned.

THE COUNCIL RESUMED ITS SITTING:
Dr. BURROWS in the Chair.

Dr. BURROWS brought up the Report of the Finance Committee.

Report of Finance Committee.

The Finance Committee have taken into consideration the whole subject of the finances of the Council, and they have now to submit their report under three heads:—

1. A balanced statement of the income and expenditure for 1860, showing the present and also, so far as the Committee can judge, the prospective financial condition of the Council.

2. The opinion of the Committee as to the present mode of computing the per-centage rate.

3. Suggestions for the more accurate statement of the finances in future years.

With regard to the first part of this subject, the following is the statement referred to:—

The Income for the Year 1860 *was as follows:—*

	£ s. d.	£ s. d.
Fees received—		
By the Branch Council for England	2149 5 0	
Ditto ditto for Scotland	547 10 0	
Ditto ditto for Ireland	507 15 0	
		3204 10 0
Dividends:		
Branch Council, England	571 5 0	
Ditto Scotland	87 9 2	
Ditto Ireland	90 13 9	
		749 7 11
Sale of Registers		165 17 8
Penalties		14 10 0
Total Receipts for 1860		4134 5 7

The excess of Expenditure in 1860 was £1327 4s. 2d.

To meet this, during the current year the following sums will be saved:

Pharmacopœia	£500 0 0	
Printing Register last year	£594 1 10	
Ditto this year	421 19 4	
	172 12 6	
Temporary Clerks:		
General Council	55 9 7	
Branch Council, England	113 17 1	
	169 6 8	
Accountant	40 0 0	
Books for the General and Branch Register, Cash Book, etc.	80 0 0	
Rent of London Office	40 0 0	
Branch Council for Ireland	100 0 0	
		1101 19 2
		£5236 4 9
From the present state of the Income this year, there will probably be an increase of £300, but it may perhaps be as well to say		225 5 0
		£5461 9 9

Expenditure for the Year 1860.

	£ s. d.	£ s. d.
Expenses of General Council		3862 1 0
Ditto Branch Council, England	769 13 10	
Ditto ditto Scotland	254 6 10	
Ditto ditto Ireland	575 8 1	
	1599 8 9	
		£5461 9 9

From the foregoing statement, it will appear that the excess of expenditure during the year 1860 amounted to £1327 4s. 2d. It will also show that nearly the whole of this sum (viz., £1101 19s. 2d.) was caused by an additional amount of labour and expenses, which will probably not occur again, leaving a deficiency of £225 5s. 0d., which amount will very likely, from the present state of the income, be more than covered by the end of the current year. The Finance Committee would also remind the Council that, besides the foregoing sources of income, the Pharmacopœia Committee may be expected, in the course of a short time, to pay to the Treasurer the £1000 advanced on that account.

Secondly,—With respect to the mode of computing the per-centage rate, the Committee have decided that the present method of computation is the proper one, in accordance with Sec. 13 of the Medical Act.

Under the third division of the report the Committee recommend that, in making up the annual accounts in subsequent years, there should be a statement of all outstanding liabilities.

Also that the date up to which salaries have been paid to the different officers and servants should be entered in the annual accounts. And lastly—

The Committee also report, that in accordance with the resolution of the Executive Committee, November 11, 1859, out of the annual salary of £200 to Mr. Bell, £50 has been paid by the Branch Council for England, and £150 on account of the General Council.

5. Moved by Dr. ALEXANDER WOOD, seconded by Sir CHARLES HASTINGS—That the report of the Finance Committee now read, be entered on the Minutes, for consideration at the next meeting of the Council.—Agreed to.

Read, Report by Dr. GARROD, Secretary of the Pharmacopœia Committee, sent in compliance with the request of the Council.

Report of the Secretary of the Pharmacopœia Committee.

During the period which has elapsed since the meeting of the General Council of Medical Education and Registration, in 1860, the three divisions of the Pharmacopœia Committee have persevered in their labours, and the manuscript of the British Pharmacopœia is approaching completion, and will very shortly be ready for press, as will be seen in the following Report, which, with the co-operation of Dr. Aquilla Smith, of the Dublin, and Dr. Charles Wilson of the Edinburgh Committees, I am now enabled to lay before the Council.

In order that the exact state of forwardness of the work may be correctly understood by the Council, it will be well to give a short sketch of its construction.

It is divided into two parts, with an Appendix.

PART I. contains a list of the Materia Medica, in which all the substances employed as medicines are inserted, and appended to each is its origin, with its definition, principal characters, tests for purity, and an enumeration of its officinal preparations.

PART II. contains the various groups of Galenicals, as extracts, infusions, tinctures, ointments, etc., with the methods of preparing each; likewise the processes for

making the numerous chemicals described in the first part of the work.

The Appendix includes the substances employed, not as remedies, but only in their preparation, and likewise the various test-solutions to be used in ascertaining the strength and purity of drugs.

One third of the work has been allotted to each section of the Committee, and the portion framed by any one has been transmitted to the other two Committees, commented upon, and afterwards revised by the original Committee, and again re-commented upon; any undecided points are then reserved until the final general meeting of the delegates of the Pharmacopœia Committee.

Part I. is necessarily the least complete, as a knowledge of all the preparations in Part II. is required before its final adjustment.

Dr. Wilson thus reports from the Edinburgh section:—"The list of the Materia Medica allotted to its share is nearly, if not altogether, complete, and will soon be transmitted to the other Committees;" and Dr. Aquilla Smith states that "Descriptions of the drugs derived from the vegetable kingdom have been drawn up by the members of the Committee, but they cannot be completed until the Galenical preparations are definitely settled and printed." Professor Harvey, the Botanical Referee, is engaged in preparing his Report, which will shortly be completed. Of the chemical preparations in the list of the Materia Medica, the formulas of the numerous preparations of iron have been printed in No. 8 of the Proceedings of the Committee, and circulated among the members of the three branch Committees. The preparations of mercury were sent to Dr. Wilson, the Secretary of the Edinburgh Committee, in April, 1861, and all the remaining chemical substances have been reported upon and approved of by the Committee.

The London Committee has constructed its third of the list of Materia Medica, as likewise nearly all the processes for the chemicals attached to that portion, and is now having a fair copy prepared for transmission to the other Committees.

Part II.—The three sections of the Committee have framed all the groups of Galenical preparations; the whole have been commented upon, and most of them revised, and either transmitted or about to be immediately forwarded for final comments.

It has been agreed by the three sections that a general meeting of delegates from each shall be held in Edinburgh the first week in next September, in order to adjust any differences which may remain, and to make arrangements for the printing and publication of the work, which it may be reasonably hoped will be accomplished by the end of the present year.

The Council will be enabled to appreciate the labour of compiling the British Pharmacopœia, and the cause of its somewhat tardy appearance, when it is stated that every preparation contained in the work has been made, often repeatedly, and such process practically examined; and it is the hope of the Committee that the British Pharmacopœia will be found worthy of the sanction and approval of the General Council.

A. B. Garrod, M.D., F.R.S., Secretary.

84, Harley-street, Cavendish-square, July 1, 1861.

6. Moved by Dr. Storrar, seconded by Dr. Acland—That Dr. Garrod's Report be printed in the Minutes.—Agreed to.

Read, the following correspondence with the Medical Department of the Army:—

"Army Medical Department, August 16, 1860.

"Sir,—The Secretary of State for War having informed me that as soon as the Licentiates of the Apothecaries' Hall of Dublin 'shall have been admitted by the General Medical Council to Registration as Medical Practitioners, its licence should be received as one entitling the holder to compete for appointments in the army, but not before;' I have the honour to request you will be pleased to acquaint me whether the licence in question entitles the holder to be registered under the Medical Act as a Practitioner in Medicine in Great Britain and Ireland.

"I have the honour to be, Sir,
"Your most obedient, humble servant,
"J. B. Gibson, Director-General.

"F. Hawkins, Esq., Registrar,
"Medical Registration Office, Soho-square."

"General Council of Medical Education and Registration,
"32, Soho-square, London, W.
"August 17, 1860.

"Sir,—I have had the honour to receive your letter, dated August 16, 1860, which, as I am not authorised to answer the question which it contains, I will take the earliest opportunity of submitting to the Executive Committee of the General Council of Medical Education and Registration of the United Kingdom.

"I have the honour to be, Sir,
"Your most obedient, humble servant,
"Fras. Hawkins, Registrar.

"J. B. Gibson, Esq., M.D., C.B., Director-General," etc.

"General Council of Medical Education and Registration,
"32, Soho-square, London, W.
"September 1, 1860.

"Sir,—I have not failed to submit the letter which I had the honour to receive from you, dated August 16, 1860, to the Executive Committee of the General Medical Council. But the Committee does not consider itself authorised to return an answer to the question contained in that letter, because to do so would not be one of the duties delegated to the Committee by the General Council.

"Under these circumstances, I venture to refer you to the following portion of a letter sent by me lately to the War Office by direction of the General Council, which portion bears upon the question contained in your letter:—

"'I am further directed by the General Medical Council to state, that they would have been gratified to put their reply in more definite terms; but there appears to the Council to be considerable doubt as to what are the privil ges or legal qualifications of the Apothecaries of Ireland.'

"I have the honour to be, Sir,
"Your most obedient, humble servant,
"Fras. Hawkins, Registrar.

"J. B. Gibson, Esq., M.D., C.B., Director-General," etc.

"Army Medical Department, June 22, 1861.

"Sir,—With reference to my letter of the 16th August last, and to your reply of the 1st September following, I shall now feel obliged by being informed whether a person registered under the Medical Act as a Licentiate of the Apothecaries' Hall of Ireland is legally entitled to practise Medicine in Great Britain and Ireland.

"I have the honour to be, Sir,
"Your most obedient, humble servant,
"J. B. Gibson, Director-General.

"F. Hawkins, Esq., 32, Soho-square, W."

"General Council of Medical Education and Registration,
"32, Soho-square, London, W.
"June 24, 1861.

"Sir,—I have had the honour to receive your letter (dated June 22, 1861,) containing an inquiry, 'Whether a person registered under the Medical Act as a Licentiate of the Apothecaries' Hall of Ireland is legally entitled to practise Medicine in Great Britain and Ireland,' and I shall lay it, together with your letter, dated 16th August last, before the General Medical Council, which will assemble in the course of the present week.

"I have the honour to be, Sir,
"Your most obedient, humble servant,
"Fras. Hawkins, Registrar.

"J. B. Gibson, Esq., M.D., C.B., Director-General," etc.

Confirmed—Joseph Henry Green.

MINUTES OF MEETING, WEDNESDAY, JULY 3, 1861.

Mr. Green, *President*, took the chair at two o'clock p.m.

The Minutes of the last meeting were read and confirmed.

Read, the following letter from the Colonial Office:—

"Downing-street, July 2, 1861.

"Sir,—I am directed by the Duke of Newcastle to acknowledge the receipt of your letter of the 20th ultimo, and to acquaint you that no report has yet been received from Canada respecting the complaint of Mr. W. J. McNiece, but that the attention of the Governor will be recalled to the subject.

"I am, Sir,
"Your obedient Servant,
"C. Fortescue.

"Dr. Francis Hawkins."

The Council resolved itself into a Committee on Education.

Regulations were presented from the Royal College of Surgeons of England, from the Apothecaries' Hall, Dublin, from the University of Durham, and from the Royal College of Physicians of London.

Read, the following letter from the Society of Apothecaries, London :—

"Apothecaries' Hall, London, E.C.
"August 30, 1860.

"Sir,—I am directed by the Masters and Wardens of this Society to acquaint you, for the information of the Medical Council, that, having taken into consideration the proper mode of appointing a special Board of Examiners in Arts, in accordance with the Fourth Resolution of the Council in reference to General Education and Examination, the Society find that the only Board to which they are authorised to entrust the examination of Candidates for the Society's Certificate of qualification is the Court of Examiners, constituted by the Act of 1815, and that the Society have no power, therefore, to appoint a Special Board of Examiners in Arts, if by such Special Board is contemplated a Board separate and distinct from the Board conducting the Professional Examination, and to which the special duty of Examining in Arts is to be delegated.

"The Society very much regret that any obstacle should be found to exist to their giving effect to the recommendation of the Council in the precise mode indicated by their resolution; but the Council may rest assured that, until the necessary legislative sanction is obtained to their appointment of a Special Board of Examiners in Arts, the Society will, to the extent of their existing powers, carry out both the spirit and letter of the recommendation.

"I have the honour to be, Sir,
"Your very obedient servant,
"Robert B. Upton, Clerk to the Society.

"Dr. Hawkins, Registrar of the General Medical Council."

The consideration of the Report of the Education Committee of 1860 was resumed.

In reference to the first resolution of the Report, viz. :—That all Students pass an Examination in General Education before they commence their Professional studies;

1. Moved by Dr. Storrar, seconded by Dr. Sharpey—That in reference to Section 1 of the Minutes relating to General Education and Examination, the time of commencing professional studies shall be understood to be the time of commencing studies at a Medical School, and that no Qualifying Body shall be held to have complied with the recommendation of the Council who shall allow the Examination in General Education to be passed after the commencement of professional study.—Agreed to.

The first resolution of the Report was adopted.

In reference to the second resolution of the Report, viz. :—That as far as may be practicable, Testimonials of proficiency granted by the National Educational Bodies, according to the following list, be accepted with such additions as the Medical Council may from time to time think proper to make.

A Degree in Arts of any University of the United Kingdom, or of the colonies, or of such other Universities as may be specially recognised from time to time by the Medical Council.

Oxford Responsions or Moderations.
Cambridge Previous Examinations.
Matriculation Examination of the University of London.
Oxford Middle Class Examinations, Senior and Junior.
Cambridge Middle Class Examinations, Senior and Junior.
Durham Middle Class Examinations, Senior and Junior.
Durham Examinations for Students in Arts in their second and first years.
Dublin University Entrance Examination.
Queen's University, Ireland, two years' Arts' course for the Diploma of Licentiate in Arts.
Preliminary Examinations at the end of the A.B. course.
Middle Class Examinations.
Matriculation Examinations.
An Examination by any other University of the United Kingdom, equivalent to the Middle Class Examinations of Oxford and Cambridge.

2. Moved by Dr. Burrows, and seconded by Sir Charles Hastings—That no Certificate from any national educational body, which does not affirm the proficiency of the Candidate in Latin, shall be deemed a sufficient proof of Preliminary Education, previous to the commencement of professional studies.

Amendment moved by Dr. Andwew Wood, and seconded by Mr. Teale :—That no certificate of proficiency in general education which does not affirm the proficiency of the candidate in Latin, shall be deemed a sufficient proof of preliminary education previous to the commencement of professional studies.—Carried.

3. Moved by Dr. Embleton, and seconded by Dr. Stokes :—That the registration examination of the University of Durham be added to the list of the testimonials of proficiency, in the second resolution of the report.—Agreed to.

4. Moved by Dr. Corrigan, and seconded by Dr. A. Smith :—That the words in the second resolution of the report 'an examination by any other University of the United Kingdom, equivalent to the middle class examinations of Oxford and Cambridge,' be expunged.—Agreed to.

The second resolution, as amended, was adopted.

The third resolution of the Report was adopted, viz. :—That the examination on general education be eventually left entirely to the Examining Boards of the national educational bodies recognised by the Medical Council.

In reference to the fourth resolution of the Report, viz. :—That students who cannot produce any of the testimonials referred to in the second resolution be required to pass an examination in Arts, established by any of the bodies named in Schedule (A) of the Medical Act, and approved by the General Council; provided that such an examination shall be, in every case, conducted by a Special Board of Examiners in Arts.

5. Moved by Dr. Corrigan, and seconded by Mr. Hargrave :—That resolution No. 4 terminate with the words "Medical Act."—Negatived.

The fourth resolution of the Report was adopted.

The Council resumed its sitting.

1. Moved by Dr. Alexander Wood, and seconded by Dr. Storrar :—That a Committee, consisting of Dr. Alexander Wood, *Chairman;* Dr. Storrar, Dr. Embleton, Mr. Arnott, Dr. A. Smith, Dr. Burrows, Mr. Teale, be appointed to consider and report on the reference of the Scottish Branch Council in regard to the publication of the Register.—Agreed to.

The correspondence with the Director-General of the Army Medical Department was read (Minutes No. 30, p. 11).

2. Moved by Mr. Syme, and seconded by Dr. Leet :—That a person registered under the Medical Act as a Licentiate of the Apothecaries' Hall of Dublin, is legally entitled to practise Medicine in Great Britain and Ireland.

Amendment moved by Mr. Lawrence, and seconded by Dr. Alexander Wood :—That this Council, having heard directly contradictory legal opinions, from the highest authorities, on the question asked by the Director-General respecting the qualification conferred by the licence of the Society of Apothecaries of Dublin, respectfully decline to pronounce an opinion on the subject, and further take the liberty of sending to the Director-General of the Army Medical Department the conflicting legal opinions which have been read to them.

The further consideration of this subject was adjourned till the following day, at two o'clock.

Dr. Corrigan brought up the Report of the Poor-Law Qualification Committee in the form of a Letter, proposed to be addressed by the Registrar to the Secretary of the Poor-Law Board, which was ordered to be printed in the Minutes.

[Proposed Letter.]

"General Council of Medical Education and Registration,
"32, Soho-square, London, W.,
"July, 1861.

"Sir,—I am directed to acknowledge the receipt of your letter of December 15, 1859 (a), and to express the regret of the Council that they did not at the last meeting of the Council, in June, 1860, give you the information referred to in that letter, and they hope the reply now given will be satisfactory.

(a) See Minutes of Branch Council for England, No. 11, for Dec. 23, 185

"In my letter of August 16, 1859, the requisite information would have been given as to the nature of the Qualifications given by all the Qualifying Bodies in the United Kingdom, and would thus have anticipated the desire expressed in your letter of December 15, 1859, that the Council had given this full information; but, as your letter of August 5, 1859 (b), only asked for information as to the nature of the Qualifications of certain corporate bodies named in that letter, the Council confined their reply to the terms of your question.

"The information that your Board requires in your letter of December 15, 1859, is 'an authoritative opinion as to the nature of the Degree, Diploma, or Licence for the Practice of Medicine or Surgery which is granted by each of the Universities, Colleges, or other Bodies enumerated in Schedule A to the 21st and 22nd Vict., cap 90.'

"As two Amended Medical Acts have been passed since August, 1859, and some changes have also taken place in the nature or amount of Qualifications granted by the several Qualifying Bodies, the Council desire me to give now the list of all the Qualifying Bodies recognised by the Act, with the nature of the several Qualifications issued by them, which are appended as follows:—

University of Edinburgh	Degree in Medicine. Master in Surgery.
Royal College of Physicians, Edinburgh	Licence in Medicine.
Royal College of Surgeons, Edinburgh	Licence in Surgery.
University of Glasgow	Degree in Medicine. Master in Surgery.
Faculty of Physicians and Surgeons, Glasgow	Licence in Surgery.
Marischal College and University of Aberdeen	Degree in Medicine.
King's College and University, Aberdeen	Degree in Medicine.
University of Aberdeen	Degree in Medicine. Master in Surgery.
Royal College of Surgeons in Ireland	Licence in Surgery. Licence in Midwifery.
University of London	Degree in Medicine.
Royal College of Physicians, London	Licence in Medicine.
King & Queen's College of Physicians in Ireland	Licence in Medicine. Licence in Midwifery.
Royal College of Surgeons of England	Licence in Surgery. Licence in Midwifery.
Society of Apothecaries, London	Qualification in Medicine, and Certificate to practise as an Apothecary in England and Wales.
Apothecaries' Hall, Dublin	Qualification to follow the Art & Mystery of an Apothecary in the Kingdom of Ireland.
University of St. Andrew's	Degree in Medicine. Master in Surgery.
University of Oxford	Degree in Medicine.
University of Cambridge	Degree in Medicine. Master in Surgery.
University of Durham	Degree in Medicine. Master in Surgery.
University of Dublin	Degree in Medicine. Licence in Medicine. Master in Surgery. Licence in Surgery.
Queen's University, Ireland	Degree in Medicine.
Archbishop of Canterbury	Degree in Medicine.

"I have the honour to be, &c.,

"Registrar."

Dr. Alexander Wood brought up the Report of the Committee on Proceedings to be adopted in removing a Name from the Register, which was ordered to be printed in the Minutes.

REPORT

on the Form of Proceeding to be adopted in the case of Removing the Name of a Licensed Practitioner from the Register.

Your Committee beg to recommend that the following Regulations should be adopted:—

1. Any application for the removal of a name from the Register shall be investigated, in the first instance, by the Branch Council of that part of the Kingdom in which the person whose name is proposed to be removed shall reside.

2. In the event of such an application being made to the General Council, the Registrar of the General Council shall refer the question to the Branch Council, by whom it should under the preceding Regulation, be primarily investigated.

3. The Branch Council having investigated the case, and having collected the evidence, shall send a statement of the case, and the evidence in support of it, to the Registrar of the General Council, one calendar month before the probable time of the meeting of the General Council.

4. The Registrar of the General Council shall thereupon consult the Solicitors of the General Council, and, if considered necessary, take the opinion of counsel on the case, and shall then take the written direction of the President as to summoning the party against whom the proceedings have been directed, to attend the General Council.

5. If the solicitors or counsel shall advise that the application is not tenable, or that the evidence is insufficient, the application shall be referred back to the Branch Council with whom the proceedings originated.

6. Should the Council remove the name of any Practitioner from the Register, under Clause xxix. of the Medical Act, due intimation of the same shall be made to all the bodies enumerated in Schedule (A) of the Act.

7. The Council recommend that an individual whose name has been once removed from the Register shall not be admitted to Examination for any new Qualification without the consent of the General Medical Council.

Alexander Wood, *Chairman.*

3. Moved by Dr. Andrew Wood, seconded by Mr. Teale—That a Committee be appointed to revise the Standing Orders of the Council. The Committee to consist of Mr. Teale, *Chairman;* Dr. Stokes, and Dr. Embleton.—Agreed to.

Confirmed—Joseph Henry Green.

MINUTES OF MEETING, THURSDAY, JULY 4, 1861.

The Minutes of the last meeting were read and confirmed.

The adjourned consideration of the correspondence with the Director-General of the Medical Department of the Army was resumed. (Minutes, see p. 39.)

1. Moved by Mr. Syme, and seconded by Dr. Leet—That a person Registered under the Medical Act, as a Licentiate of the Apothecaries' Hall of Dublin, is legally entitled to practise Medicine in Great Britain and Ireland.

Mr. Lawrence was permitted to substitute the following amendment for that which he proposed at the last meeting of the Council.

First amendment, moved by Mr. Lawrence, and seconded by Mr. Hargrave—That this Council, having heard contradictory legal opinions, on the question asked by the Director-General respecting the Qualification conferred by the Licence of the Society of Apothecaries of Dublin, respectfully decline to pronounce an opinion on what they regard as a purely legal question.—Carried.

Second amendment, moved by Dr. Storrar, and seconded by Dr. Sharpey—That with reference to the case of the Licentiates of the Society of Apothecaries, Dublin—considering the probable intention of the Legislature with regard to their privileges, the custom and usage of their employment as Medical Practitioners, their appointment to offices as Medical Practitioners, and the recognition of their Qualifications as such by the proper authorities—the Medical Council are of opinion, without presuming to decide the legal question involved, that it would be in accordance with the spirit and meaning of the Medical Act to consider the said Licentiates when Registered as "Legally Qualified Practitioners of Medicine."—Negatived.

Question put to the vote and carried,—That the original motion be amended."

Mr. Syme required that the majority and minority on the question, "that the original motion be amended," be entered on the Minutes.

Majority.—Mr. Arnott, Dr. Acland, Dr. Bond, Dr. Embleton, Dr. Andrew Wood, Mr. Watt, Dr. A. Smith, Mr. Hargrave, Dr. Apjohn, Dr. Corrigan, Mr. Lawrence, Mr. Teale, Dr. Stokes. Minority.—Dr. Burrows, Mr. Nussey, Dr. Storrar, Dr. Alexander Wood, Mr. Syme, Dr. Thomson, Dr. Leet, Sir Charles Hastings.

The Council resolved itself into a Committee on Education.

1. Moved by Mr. Arnott, seconded by Mr. Lawrence—That the First-class Certificate of the College of Preceptors be received as a certificate of proficiency in General Education.—Agreed to.

Moved by Dr. Acland, seconded by Dr. Burrows—That after January, 1863, all Junior Middle-class Examinations be excluded from the List.—Agreed to.

3. Moved by Dr. Acland, seconded by Dr. Stokes, and

(b) See Minutes of General Council, No. 11, Sect. 3, for August ,

agreed to—That the Registrar be directed to lay on the table a list of all Licensing Bodies (other than those specified by name in Schedule A) whose qualifications have been admitted as a claim for Admission to the Medical Register; that the Registrar be directed to write to all such Licensing Bodies, whether Colonial or Foreign (as may seem fit to the President and Executive Committee), requesting them to favour the Medical Council with three copies of their Curricula of Education, Professional and non-Professional, together with an account of the mode in which their Examinations are conducted, and that one set of the Regulations so received be transmitted to each of the Branch Councils of Scotland and Ireland; and, that in case there be any Colonial Universities or Corporations known to issue Medical Licences, other than those included in the above List, that a similar request be transmitted to them.

4. Moved by Mr. Syme, and seconded by Dr. Thomson—That while fully recognising the importance of a literary, philosophical, and scientific education, as an introduction to the study of Medicine, is it not expedient at present to restrict Graduation in Medicine to those possessed of a Degree in Arts, or who have passed an equivalent examination.

Amendment moved by Mr. Teale, and seconded by Dr. Apjohn—That the Council adhere to their opinion, recorded in the Report of the Committee of Education of 1860, and adopted by the Council on the 23rd of June, 1860, to the following effect:—"That it is not desirable that any University of the United Kingdom should confer a Degree in Medicine, whether that of Bachelor or Doctor, upon Candidates who have not graduated in Arts, or passed all the examinations required for the Bachelorship in Arts, or the examinations equivalent to those required for a Degree in Arts;" and that the Council now extend this expression of their opinion to the Degree in Surgery.

The further consideration of this subject was adjourned to the following day at two o'clock.

The Council resumed its sitting.

The Report of the Finance Committee was considered. (Minutes, see p. 38.)

2. Moved by Dr. Alexander Wood, seconded by Sir Charles Hastings—That the Council approve of the Report of the Finance Committee, and vote their thanks to the Treasurers for the trouble they have taken in managing the funds of the Council.—Agreed to.

The following letter was then read, addressed to the President of the General Council:—

"Hadley, July 4, 1861.

"Sir,—I beg leave to tender to the Medical Council my resignation of the office of Treasurer, and at the same time to express my grateful acknowledgment of having been honoured by their confidence.

"I remain, Sir,

"Your obedient servant,

"Joseph Henry Green."

The Report of the Secretary of the Pharmacopœia Committee was read. (Minutes, see p. 38.)

3. Moved by Dr. Storrar, seconded by Dr. Sharpey—That Dr. Garrod's Report stand a part of the Minutes.—Agreed to.

The Report of the Poor-Law Qualification Committee was read. (Minutes, see p. 40.)

4. Moved by Dr. Corrigan, and seconded by Mr. Syme—That the Report just read be adopted, and that the Registrar be directed to forward a copy of the Report to the Poor-Law Board.

Amendment moved by Dr. Alexander Wood, and seconded by Mr. Watt—That it is inexpedient for the Council to make any communication to the Poor-Law Board under present circumstances.—Amendment carried.

Confirmed—Joseph Henry Green.

MINUTES OF MEETING, FRIDAY, JULY 5, 1861.

Mr. Green, *President*, took the chair at two o'clock p.m.

The Minutes of the last meeting were read and confirmed.

1. Moved by Dr. Alexander Wood, and seconded by Dr. Burrows—That the attention of the Solicitors of the Council be drawn to the case of Jones *v.* the Queen's Proctor, which appears in the *Times* of July 5, 1861.—Agreed to.

The Council resolved itself into a Committee on Education.

The adjourned consideration of Mr. Syme's motion was resumed.

Moved by Mr. Syme, and seconded by Dr. Thomson—That while fully recognising the importance of a Literary, Philosophical, and Scientific Education as an introduction to the study of Medicine, it is not expedient at present to restrict graduation in Medicine, to those possessed of a Degree in Arts, or who have passed an equivalent examination.

The first amendment was moved by Mr. Teale, and seconded by Dr. Apjohn—That the Council adhere to their opinion recorded in the Report of the Committee of Education of 1860, and adopted by the Council on the 23rd of June, 1860, to the following effect: That it is not desirable that any University of the United Kingdom should confer a Degree in Medicine, whether that of Bachelor or Doctor, upon Candidates who have not graduated in Arts, or passed all the Examinations required for the Bachelorship in Arts, or the Examinations equivalent to those required for a Degree in Arts; and that the Council now extend this expression of their opinion to the Degree in Surgery.—Carried *nemine contradicente*.

The second amendment was moved by Dr. Sharpey, and seconded by Dr. Storrar—That while fully recognising the importance of a Literary, Philosophical, and Scientific Education as an introduction to the study of Medicine, it is not expedient at present to restrict graduation in Medicine to those possessed of a Degree in Arts, or who have passed an equivalent Examination; but the Council desire to record their opinion, that the Preliminary Examination to be passed by Candidates for Degrees in Medicine or Surgery, before commencing Professional study, should be such as to imply a decidedly higher General Education than that required of other Medical Students on admission to be registered.—Negatived.

Question put to the vote, and carried—That the original Motion be amended.

Dr. Alexander Wood required that the Majority and Minority be entered on the Minutes, on the question, "That the original Motion be amended.

Majority—Dr. Burrows, Mr. Arnott, Mr. Nussey, Dr. Acland, Dr. Bond, Dr. Embleton, Dr. Storrar, Dr. Alexander Wood, Dr. Andrew Wood, Mr. Watt, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Dr. Corrigan, Sir Charles Hastings, Dr. Sharpey, Mr. Lawrence, Mr. Teale, and Dr. Stokes.—Minority—Dr. Thomson.

Dr. Alexander Wood required that the Majority and Minority on the Second Amendment be entered on the Minutes.

Majority—Dr. Burrows, Mr. Arnott, Dr. Acland, Dr. Bond, Dr. Embleton, Dr. Alexander Wood, Dr. Andrew Wood, Mr. Watt, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Dr. Corrigan, Sir Charles Hastings, Mr. Lawrence, Mr. Teale, and Dr. Stokes.—Minority—Dr. Storrar, Dr. Thomson, and Dr. Sharpey.

The Council resumed its Sitting.

2. Moved by Dr. Acland, and seconded by Dr. Stokes—That the Council request the President to represent to the proper Authority the advantage which the Council would derive if a suitable Office were provided by Her Majesty's Government, for the transaction of the ordinary business of the Council.—Agreed to.

The Report on the Form of Proceeding to be adopted in the case of Removing the Name of a Licensed Practitioner from the Register, having been considered and amended, was adopted, and ordered to constitute a part of the Standing Orders.

[The Report will be found on page 42.]

Mr. Teale brought up the Report of the Standing Orders Committee, which was ordered to be printed, and circulated with the Minutes.

Dr. Corrigan brought up the Report of the Medical Acts Amendment Committee, which was ordered to be printed in the Minutes.

Report of the Medical Acts Amendment Committee.

The Committee appointed to consider what further amendments in the Medical Act it would be desirable to submit for the consideration of the General Medical Council, with a view to the introduction of an Amended Medical Act, beg to report that they have, in the first place, considered the Report of the Committee, printed in the Minutes of General Council of June 22, 1860, and that they approve of the

suggestions therein contained for Amendment of Sects, X., XI., XIII., XIV., XXV., XXVII., XXIX. The alterations proposed with regard to Sects. XLII. and XLVII., are not considered necessary.

With respect to Sect. XL., the Committee have had an interview with a deputation of the National Medical Registration Association, who presented to the Committee the following Memorial, addressed to the General Medical Council, signed by 1312 Medical Practitioners, Members of 43 Medical Registration Associations :—

To the General Council of Medical Education and Registration of the United Kingdom.

The Memorial of the undersigned legally qualified and duly registered Medical Practitioners of the United Kingdom

Respectfully Sheweth,

That the Medical Act, so far as it was intended to protect the Medical Profession and the public from the improper assumption of Medical Titles, and the practice of Medicine and Surgery by unqualified persons, has failed to effect the objects for which it was passed.

That no protection whatever is afforded by Clause XL. of the said Act against the assumption of Medical Titles by unqualified persons; because so long as a Medical Title, taken however wilfully or falsely, is used without the addition of words implying that such persons are registered under the Medical Act, or without making mention of the licensing body through which such titles are pretended to have been derived, no offence, within the meaning of the Act, is committed.

Your Memorialists therefore pray the General Council that they will apply to Parliament to amend the Medical Act.

That by such amended Act the defects—more particularly of Clause XL. of the said Act—may be obviated, whereby the Medical Profession and the public may obtain that fair protection and immunity from the practices of imposters, which, on the passing of the Medical Act, it was the intention of the Legislature to secure.

Signed on behalf of forty-three Medical Registration Associations and Societies.

The following are the proposed amendments suggested by the National Medical Registration Association, accompanied by a letter from their Solicitor, Mr. Gough :—

Clause XV.—After words "respectfully obtained," insert "And any person who shall falsely pretend to be, or who shall take or use any title implying that he is Registered under this Act, shall, upon summary conviction for any such offence, pay a sum not exceeding £20."

Clause XL.—Any person who is unable to prove to the satisfaction of the Medical Council that he is qualified to Register under the Medical Act, and who shall pretend to be or take or use the name, style, or title of a Physician, Doctor of Medicine, Licentiate in Medicine or Surgery, Bachelor of Medicine, Surgeon, Medical Practitioner, Surgical Practitioner, General Practitioner or Apothecary, or who shall take or use any other name, style, title, or addition or description, implying that he is a member of the Medical Profession [or who shall in any way follow, practise, or pursue the Science or calling of Medicine or Surgery] shall, upon a summary conviction for every such offence, pay a sum not exceeding £20.

Schedule (A), Section XI.—To be omitted.

"44, Parliament-street, S.W., July 2, 1861.

"Dear Sir,—After the most careful consideration of the proposed Amendments, I strongly advise that the words proposed to be left out (in brackets), in the 40th Clause, should be retained.

"Should Parliament reject them, no injury can arise to the rest of the Bill; but I am of opinion that, with the most ordinary exertion on the part of the Parliamentary agent, the House would be induced to pass the Amendment as proposed. It appears to me to be really the only vital part of the Bill which will protect the *public* from the evils complained of; and it is my belief that to omit the words proposed would be to leave the penal clause as much a dead letter as it is at present.

"I am, dear Sir, truly yours,

"K. H. Gough.

"The Secretary of the
"Medical Registration Association."

In addition to the above, the following Amendments of Clause XL. have been suggested :—

AMENDMENT NO. 1.

"Any person who shall pretend to be, or use the name or title of a Physician, Doctor of Medicine, Licentiate in Medicine, Surgery, or Midwifery, Bachelor of Medicine, Surgeon, General Practitioner, or Apothecary, not being registered under this Act, shall, upon a summary conviction for every such offence, pay a sum not exceeding 20*l.*"

"Any registered Practitioner assuming or using any title other than that under which he is registered, shall, upon a summary conviction for every such offence, pay a sum not exceeding 20*l.*"

AMENDMENT NO. 2.

"Any person who shall take or use any name or title used in this Act, or any other title by which he implies that he practises one or other of the departments of the Medical Profession, shall be held also to imply that he is recognised by law as qualified so to do; and he shall, if he be an unregistered person, be liable, upon summary conviction for every such offence, to pay a sum not exceeding 20*l.*

"And any registered person who shall use any title other than he has on the Register, shall be liable to the same penalty."

AMENDMENT NO. 3, SUGGESTED IN THE "LANCET," JUNE 29, 1861.

"Any person who is not registered under this Act, who shall pretend to be, or take the name or title of a Physician, Doctor of Medicine, Licentiate of Medicine, Bachelor of Medicine, Medical Practitioner, Surgeon, Licentiate in Surgery, Surgical Practitioner, General Practioner, or Apothecary, or who shall take or use any other name, title, addition, or description, implying or conveying the impression that he is in any way a member of the Medical Profession, shall, on a summary conviction for such offence, pay a sum not exceeding 20*l.*"

With regard to the various amendments above suggested, the Committee at present feel themselves unable to do more than lay them before the Council, with a view to their being fully considered between this time and the meeting of the next Session of Parliament.

The National Registration Association, in their interview with the Committee, were very desirous that an amended Act, in substance as proposed by them in reference to Clause XL., should be introduced this session and read a first time. The Committee fear that it would be impossible to introduce an amended Act at this period of the Session. It would require close examination to ascertain how far the alteration of two clauses might affect other portions of the Act; and the introduction of any proposed amended Act, not maturely considered previously to its introduction, would probably tend to mar rather than to forward desired improvements in the Act. It may be deserving of the consideration of the General Council, whether they might depute to the Executive or other Committee the duty of drawing up, during the interval between this time and the next Meeting of the General Council, an Amended Medical Act.

The Committee would have proceeded to reconsider in detail the several clauses of the existing Medical Acts, but they defer it for the present, in the hope that the General Council will delegate, as above recommended, either to the Executive Committee, or to a Committee appointed for the purpose, the task of carefully considering and drawing up a fully amended Medical Act. D. J. Corrigan, *Chairman.*

P.S.—Since the above Report was drawn up, the following Memorial has been received from the Members of the Bristol and Bath Medical Association :—

To the General Council of Medical Education and Registration of the United Kingdom.

The Memorial of the Members of the Bristol and Bath Medical Registration Association

Sheweth,

That this Association was established soon after the passing of the Medical Registration Act, for the purpose of promoting and advancing the interests of the Medical Profession in the above cities and neighbourhood, and also for carrying into effect the provisions therein contained for suppressing the use of Medical titles by unqualified Practitioners.

That, in carrying out these purposes, the Association has prosecuted several individuals falsely calling themselves by

some, or one, of the Medical titles distinguished in the said Act, and acting in all respects as duly qualified Practitioners, but in all cases they have failed in obtaining a conviction.

That your Memorialists have been informed by their Legal advisers that in all cases in which an appeal has been made to the superior Courts of Law, either to sustain or quash a conviction, the decision of the Judges has been in favour of the unqualified Practitioner; and, under these circumstances they have been advised to refrain from further prosecutions until an amendment of the Medical Act has been obtained. Your Memorialists have, therefore, duly considered the various clauses of such Act, especially those which, from their experience in the Magistrates' Courts, and the decisions which have taken place therein, have been found quite inoperative to check the use of Medical titles by unqualified Practitioners, and they therefore beg to submit the necessity of an alteration in the various sections hereinafter mentioned, and the substitution of the following amendments and alterations therein:—

SUGGESTIONS FOR AN AMENDMENT OF THE MEDICAL REGISTRATION ACT.

First.—That the Registration of all Medical Practitioners shall be compulsory.

Section XVII.—That the words "less than twenty-one years of age," should be inserted, for the purpose of confining the operation of this Section to persons who should have attained that age on or before August 1, 1815.

Section XXVIII.—That the production of the printed copy of the Register shall be evidence in all cases, that a person, whose name does not appear therein, is not Registered, and "that he holds no qualification entitling him to be Registered under the said Act," and that the onus of proof that such person is duly qualified, shall fall upon the alleged offending party.

Section XXIX.—A more expressive or defined term than "infamous" should be inserted, so as to enlarge the powers of the General Council in dealing with unprofessional conduct, and facilitate their proceedings; the words "or disgraceful," added thereto, would probably meet this requirement.

Section XXXIV.—The words "when used in any Act of Parliament," contained in this Section, should be expunged.

Section XXXVI.—The addition of the words "No person shall practise Medicine or Surgery for gain, or hold," etc., in this Section would, it is believed, effectually prevent unqualified Practitioners from practising.

Section XXXVII.—An addition to this Clause in the Act should be made, or a new Section inserted, to the following effect:—

"That no Certificate as to cause of death, or otherwise, where the same shall purport to be a Medical Certificate, or signed by a Medical Practitioner, shall be valid, or received in evidence, unless the person so signing the same shall be Registered under the said Act."

Section XL.—This Clause should be altogether repealed, it having been found perfectly useless in effecting the purpose for which it professes to be enacted. The following Section should be inserted in its place:—

"Any person not Registered under this Act, and not holding any qualification entitling him to be Registered, who shall pretend to be, or practise as, or take or use the name or title, etc. (as in the present Section), either singly, or in connection with any other designation, or any Medical name, title, addition, description, or alleged qualification, shall, upon a summary conviction for any such offence, pay a sum not exceeding £20."

[SCHEDULE (A), NO. 11.]

The word "or," after the word "examination," in this clause, should be expunged, and the word "and" inserted instead.

Your Memorialists therefore pray your Honourable Council to take into consideration the before-mentioned alterations and amendments, and to use your influence in obtaining an amended Act, carrying them into effect.

Signed, on behalf of the Association,

William Davies, M.D., F.R.C.P., *Chairman of Council.*
James P. McDonald, L.R.C.P.E. } *Hon. Secs.*
Richard Sumner Fowler, M.R.C.S. }

Dr. ALEXANDER WOOD brought up the following Report of the Committee on the Publication of the Register, which was ordered to be printed in the Minutes:—

REPORT.

The Committee find that the following has been the expense of publishing the Register:—

	£	s.	d.
Cost of printing and publishing the Register in 1859.	1122	0	0
Produce of sale 494 10 4			
Waste paper 25 19 4			
	520	9	8
Loss in 1859	£601	10	4
Cost of printing and publishing the Register in 1860.	594	1	10
Produce of sale	139	18	4
Loss in 1860	£454	3	6
Cost of printing and publishing the Register in 1861.	421	9	4
Probable produce of sale	139	9	4
Probable loss this year	£282	0	0

It will be seen that the loss since the first publication has been gradually diminishing, and may now be estimated not to exceed £300 annually.

A considerable part of the expense consists in the percentage which is paid to the printers for keeping the type standing.

The Council will see, from the following statement, that this is considerably less expensive than re-setting the Register:—

COST OF PRINTING THE MEDICAL REGISTER.

Cost of Printing the Register under the present system, by keeping the *type standing*:—

	£	s.	d.
Cost of keeping the type standing for one year	290	0	0
Corrections	15	0	0
55 Reams of Paper, at 23s. per Ream	63	5	0
Machining ditto, at 8s. per Ream	22	0	0
Composing and printing Table of Accounts, and Binding on Guards	5	0	0
Binding 1000 Copies, at 11d. each	45	16	8
Cost of 1000 Copies	£441	1	8

Cost of Printing the Register if the type is distributed, and the work *re-composed*:—

	£	s.	d.
Cost of re-composing the Register	about 405	0	0
Corrections—say at least	40	0	0
55 Reams of Paper, at 23s. per Ream	63	5	0
Machining ditto, at 8s. per Ream	22	0	0
Composing and printing Table of Accounts, and Binding on Guards	5	0	0
Binding 1000 Copies, at 11d. each	45	16	8
Cost of 1000 Copies	£581	1	8

The Cost of	1000 Copies, say	£440	The sale of these at	4s. per copy,	£200
,,	2000 ,,	570	,, ,,		400
,,	3000 ,,	700	,, ,,		600
,,	4000 ,,	830	,, ,,		800
,,	5000 ,,	960	,, ,,		1000
,,	6000 ,,	1090	,, ,,		1200
,,	7000 ,,	1220	,, ,,		1400
,,	8000 ,,	1350	,, ,,		1600
,,	9000 ,,	1480	,, ,,		1800
,,	10,000 ,,	1610	,, ,,		2000

In the event of the Courts of Law, Coroners, and Registrars of Deaths being compelled to have copies of the Register in their offices, the sale will be very considerably increased.

The sale in 1860 only amounted to 694 copies, produeing £139 18s. 4d.; in all probability 750 may be disposed of this year; but it would require a sale of nearly 5000 copies to be remunerative; 5000 copies would cost £960, and produce £1000, a little over the cost.

The Committee have had before them a proposal from Mr. Churchill to publish the Register in conjunction with his Directory, supplying a sufficient number of copies of the Register without any additional matter. This proposal was

merely verbal. The Committee have requested Mr. Churchill to put it in writing, and beg to recommend that the whole matter be left to the decision of the Executive Committee.

ALEXANDER WOOD, Chairman.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

INVERSION OF THE UTERUS.

DR. VAN DYCK reported to the Medical Society of the State of New York a case of complete inversion of the uterus. He was called, June 13, to a German, aged 28, who had just given birth to her first child, the midwife believing that the whole of the placenta had not come away; but he found that this was entire, and the contraction of the uterus satisfactory. She suffered considerable pain in the abdomen, which was relieved in a day or two by an anodyne and castor-oil. Nothing unusual occurred until the 21st, when he was sent for again, and found her sitting at stool, with the uterus, about the size and shape of a goose-egg, lying between her thighs, and completely inverted. Laying her on her left side, with her knees drawn up, he grasped the organ with his right hand, the fundus resting on the palm. "Firm pressure was made, and the organ began to ascend. The hand was then carried into the vagina and lengthened by straightening the thumb and fingers into a conical form. The fundus was dimpled, and thus carried through the os and cervix to its natural situation. The organ soon contracted, and the hand was gently withdrawn. The case was interesting in two particulars:—1. Partial inversion was produced at the time of delivery, and continued to progress until the eighth day after confinement, when a little straining rendered it complete. 2. The suffering, notwithstanding this state of things, ceased on the third day, which circumstance was accounted for by supposing that at that time the uterus had so far descended into the vagina as to render further spastic contraction unnecessary."—Dr. Thorne, in the course of the discussion which followed the paper, stated that he was consulted by a woman who presented a tumour between her thighs, covered with a cuticle resembling skin in appearance. She stated that it had existed several years, but that she now applied for treatment on account of troublesome ulceration of its surface. After a very careful examination, the tumour was decided to be an inverted uterus, and it was reduced without much difficulty.—Dr. Quackenbush referred to a case seen by Dr. White, in which reduction took place after thirteen years. He though that in all cases of inversion restitution took place first at the os, and continued from below upwards, instead of by simple dimpling of the fundus. He believed, also, that the accident was sometimes produced independently of any mechanical cause. It has been so, in the hands of scientific Practitioners, when no traction on the cord, or even any attempt at removing the placenta, has been made. In some cases, if we draw very lightly on the cord, inversion takes place, while in others, pulling with great force will not produce it. It is, therefore, necessary to assume that some pathological condition, which we call a "predisposition," exists in one instance and not in the other.—Dr. Van Dyck observed that some distinction should be made between recent and old standing cases, inasmuch, as in the latter it would be almost impossible to produce dimpling. In his case he tried to shove up the uterus with the whole hand, but could not succeed. He then lengthened out the finger, the dimpling soon came on and the organ was replaced. In some of these cases he thought that dimpling was a matter of necessity.—Dr. A. Lee said that although he could not claim to know much about this subject practically, he had yet made many investigations concerning it, in consequence of his having been an "expert" on a trial at Chicago. He was enabled to collect about 200 published cases, and had made an analysis of 148 of these. There is a belief very prevalent in the Profession that if the womb is inverted with adherent placenta, it must make its appearance externally. This, Dr. Lee believes to be a mistake, and certainly if the placenta has been separated, there is room enough in the vagina for the womb to remain without appearing externally. In the case tried at Chicago, the attending Physician maintained that the inversion was of gradual occurrence, and brought an action against another Practitioner for having charged him with negligence. He lost his cause, and deservedly, for he only examined the woman and discovered the inversion thirty or forty days after delivery, although hæmorrhage had often occurred in the interval. Among the points discussed in this trial, was the gradual production of the inversion, it being contended by many witnesses that because the uterus did not appear externally, therefore the inversion did not take place at the time of delivery. In this opinion Dr. Lee does not concur, believing, however, not that the inversion is gradual, but that it occurred during the first day, the inverted womb remaining within the vagina. He related a case in which he detected partial inversion of the uterus which had been produced twenty-five years previously, and had given rise to frequent hæmorrhage. As the period for the cessation of the menses was at hand he did not attempt reduction, and for the last two years bleeding has not re-appeared. One important fact results from Dr. Lee's statistics, viz., that the removal of the inverted uterus by ligature is not a very dangerous operation, as of thirty-two well attested cases only four proved fatal. Out of fourteen cases of excision four proved fatal.—Dr. Quackenbush in reply to Prof. Lee observed that the manner in which inversion is produced is enveloped in doubt. It has been almost universally supposed "that the uterus becomes inverted by a depression of the fundus, that at this point there is an indentation, which becomes larger and larger, and finally the whole organ turns inwards upon itself and becomes entirely inverted. I suggested in a report read before this Society another mode, viz., that the inversion commenced at the neck. If you place your hand upon the abdomen shortly after delivery the fundus feels hard and firm; while, if an examination be made per vaginam the neck is found flaccid and relaxed, and you can hardly tell where the vagina terminates and where the womb commences: and is this not the very condition we would expect to find if the inversion commenced in the manner indicated?" After describing the arrangement of the two orders of uterine muscular fibres and their action in emptying and contracting the uterus, Dr. Quackenbush continued, "Now at this stage there may be irregularity of contraction. The circular fibres, constituting a sort of sphincter muscle of the womb, are relaxed, and form no firm attachment for the longitudinal fibres. These last, which may represent so many columns resting on this circular band as a foundation, contract, and having no support, they begin to yield from the bottom, evolution takes place, the neck doubles in upon itself and passes through the os, the body follows, and finally the fundus, dragged down upon the body, pursues the same course, and we have now a complete inversion—the *fundus being the last portion inverted*, instead of the first, as has been generally, or, I may say universally, admitted. True, all authors who have treated this subject teach differently; but what is the reason? They have seldom, if ever, seen the accident; their attention has not been particularly drawn to it, and hence they have adopted the universal notion which, in my opinion, is as erroneous as it is universal. If, then, this is the manner in which inversion occurs, what is the *cause* of it? I consider it an *irregularity of action*, and by this term I do not mean an *undue* action of some of the fibres of the body and the fundus, whereby a portion is drawn down or depressed, but a *want of correspondence* between the muscular action of the neck and the body of the uterus, in which there is a complete atony of the muscular fibres of the neck, which is consequently soft and yielding, and a partial action of the fibres of the body and fundus, sufficiently strong to draw it down through the patulous mouth, but not active enough to detach the placenta, which we usually find adherent. Here, then, we have an atonic and patulous condition of the os and cervix uteri, affording no impediment to the protrusion of the body and fundus, which is drawn down by the slight muscular contractions, by the tractions on the cord, by the weight of the fundus itself with the placenta attached, or perhaps is pushed down by the superincumbent mass of intestines, aided by the contractions of the abdominal muscles. I am led to this conclusion by the fact that in numerous cases of this character the placenta remains attached to the uterus, not only after it is inverted, but even when it has protruded through the vulva, which would not

be the case if the action had been excessive, for the contractions violent enough to produce the inversion would certainly be sufficiently powerful to detach the placenta."—*American Medical Times*, Nos. 6 and 7.

EXCERPTA MINORA.

Arsenic in Chronic Diarrhœa.—Drs. Tripler and Blackmann, in their "Handbook of Military Surgery," confirm a statement made by Dr. Foster, of Cincinnati, as to the great value of very small doses of Fowler's solution, given three times a-day, in chronic diarrhœa.—*Boston Medical Journal*, May 30.

Coffee in Pertussis.—The Editor of the *Boston Medical Journal* states that, on the authority of the recommendation of Dr. Guyot, he has tried strong coffee as a remedy for pertussis with marked effect. Decoction of pure coffee should be made as strong as possible, and given in quantities only short of enough to cause unpleasant stimulating effects. The children took it very readily. In one of the cases (aged 6) a tablespoonful and a-half of very strong coffee, sweetened, but without milk, was given three times a-day; and in another (aged 18 months), half-a-cup was taken once a-day.—*Boston Journal*, May 16.

Iodine in Tubercular Meningitis.—Dr. Bourrousse, at the conclusion of a long memoir laid before the Academie de Médecine, states:—1. All, or almost all, cases of tubercular meningitis, which have resisted hitherto all therapeutical procedures may now be deemed curable. 2. One or two hundred thousand infants will owe their lives each year to the employment of iodide of potassium in acute hydrocephalus. 3. This meningeal affection is the only tubercular disease which has been rendered curable, and this success will probably lead to amendment in the mode of treating other forms of tuberculization.—*Moniteur des Sciences Méd.*, No. 73.

New Formulæ for the Administration of Copaiba.—M. Favrot recommends the two following formulæ, which have received the approbation of M. Ricord:—1. Balsam of copaiba 55 drachms, Norwegian tar 5 drachms, calcined magnesia 4½ drachms. Mix well, and divide for 400 capsules, the dose being 15 capsules per diem. The tar completely masks the taste of the balsam, while the capsules still have scarcely any smell of the tar. 2. Balsam 68 drachms, neutral pepsine 15 drachms, subnitrate of bismuth 3 drachms, calcined magnesia 4½ drachms. Mix for 600 capsules—15 to 18 to be taken daily. 3. Another formula recommended by M. Grimault consists in the association of matico with copaiba, which not only takes off its unpleasant taste and smell, but adds to its efficacy, especially in gleet. Balsam 25 drachms, essence of matico 1½ drachm, calcined magnesia q. s for 100 capsules. 4. M. Débout recommends the following electuary:—Copaiba ʒvij½., cubebs ʒxj., essence of matico ʒ½, sugar q. s. To be taken in 3 days in divided doses.—*Bulletin de Thérapeutique*, June, p. 507.

FOREIGN CORRESPONDENCE.

GERMANY.

Jena, June 17.

ON CHANGES OF TEMPERATURE IN ACUTE DISEASES.

Dr. Uhle, a pupil of Professor Wunderlich, of Leipzig, is now Professor of Clinical Medicine at this University; he succeeded Dr. Leubuscher, whose work on Pathology and Therapeutics was reviewed in your columns some time ago, and who is now at Berlin in large private practice. The method of clinical instruction used here is the same as in all German Universities, especial care being paid to the physical examination of the patients. Besides auscultation, percussion, and the microscopical and chemical examination of morbid productions, the changes of temperature are also thoroughly investigated, especially in acute diseases; and I now intend giving you an account of the results recently obtained thereby.

The theory that an increased temperature is the essential and only constant symptom of fevers, is due to Galenus; but this was rejected by Boerhave, who thought that the increased activity of circulation was a constant sign of fevers, there being no augmentation of heat in the rigors. De Haen refuted this opinion, and showed, by direct observation, that the heat is abnormally raised even in the rigors, while the frequency of the pulse is subject to great variations, and may even be less in fevers than in the normal state. Professor Traube, of Berlin, was the first who accurately determined the changes of temperature throughout the course of certain acute diseases, in a considerable number of cases, and thereby was led to revive the old theory of crises and critical days. The transition from the abnormal heat to the normal temperature either comes on rapidly or gradually; that is, either within twelve to thirty-six hours, or it may be protracted over a number of days. The temperature may, in the course of a single day, fall to from 3·6° to 5·4° F.; in other cases only so much within five or six days. Profuse perspiration and elimination of urates may be observed under different circumstances, and they do not necessarily accompany a crisis, that is, a rapid and permanent decrease of temperature, with which a similar diminution of the frequency of the pulse is generally synchronic. If acute diseases have a slower course, and the abnormal temperature disappears gradually, the fever often takes a hectic form towards the end; that is, the temperature approaches the normal, or even falls below it, in the morning, while in the evening it rises considerably above it. The rapid decrease of temperature which leads to recovery—if it is, as usual, observed before the fourteenth day—always takes place either on the third, or the fifth, or the seventh, or the ninth, or the eleventh day of the illness. This proposition, that crises will always fall on odd days, has been very much contested; especially as we are not always quite sure of the day on which the fever has commenced; but wherever it has been possible to find this out, the predilection of the crisis for odd days has been unquestionably proved. If in the course of an inflammation accompanied with fever the temperature on one of the days just mentioned suddenly falls, the inflammation at the same time ceases to spread any further, although it may still subsist in the part once attacked, and there run through its different stages. The temperature often falls even below the average height, and the normal heat returns only gradually. The remedies by which we are able considerably to diminish the heat, are digitalis, abstraction of blood, and calomel in large doses; but it must be kept in mind, that they can never bring about a crisis on a non-critical day. The quickness of the pulse is not so reliable a means for judging the fever as the temperature, as the former rises and falls regularly, neither at the same time with, nor in the same proportion to, the former one.

Amongst the observations made in Germany on the course of fever in certain diseases, those of Professor Thierfelder, of Rostock, are of peculiar interest, based as they are upon 62 cases of typhoid fever, in which the commencement of the disease could be accurately determined; while the whole number of cases of typhoid fever in which he has measured the temperature is above 200. These observations have given the following results:—

1. *Concerning the Temperature in the first few Days of the Disease.*—In typhoid fever the increase of heat is gradual during the first three or five days. In this respect typhoid fever essentially differs from fever in other acute diseases, as pneumonia, where the temperature, during the rigors in the commencement of the illness, reaches such a height within a few hours, as it does in typhoid fever only in the stage of exacerbation on the second or third day. In erysipelas and pneumonia the temperature remains rather stationary during the first few days, and does not fall so considerably at the time of remission in the morning as in typhoid fever. If the increase of heat in the commencement of the latter goes on for five days, the critical fall of the temperature cannot be expected before the seventeenth day.

2. *The Stage of Maximum Temperature* then follows, and lasts from one to four weeks and a-half continually, with slight remissions in the middle of the second or third week of the disease. The temperature in the evening is on the average 104° to 106° F.; the maximum amounts to 107°, which, if this stage has an average duration, is observed in the middle of it; if it lasts rather shorter, in the first, and if longer, in the second half of it. At the same time, a quotidian remittent type is observed in the increased heat from the beginning, with remission in the morning; a febris continua continens only now and then, during the maximum, or in consequence of certain complications. The amount of the daily remissions

is very different, and an important means for judging the violence of the fever, as it is inversely proportional to the latter. Matutinal remissions of 2° F. and more, if observed in the stage of maximum heat, show that the case is moderately severe; but if the remissions throughout this stage only amount to 1° F., or even less (the remittent type approaching the continuous), the prognosis is bad. Thus, the amount of the remission is more important for the prognosis than the absolute maximum of heat; and the case is the more severe the longer the maximum heat lasts, and the less considerable is the amount of the remissions. Independently of the daily variations, we have also during the stage of maximum heat other variations, showing an increase or decrease of the typhoid fever, which are so frequently observed on particular days, that a certain law cannot fail to be recognised in it. If death takes place during the stage of maximum heat, the fever increases considerably towards the end, and generally three or five days before death the pulse becomes very quick (160 to 180); the temperature continues to rise, and may, some hours before death, amount to 109° F.

3. *The Return to the Normal Temperature* never takes place suddenly, but is protracted over several days. It is sometimes a continuous falling; but more frequently a considerable decrease in the matutinal hours is at first observed, and the falling in the evening only takes place some time after. Such matutinal decreases of heat take place especially on the seventeenth day; more rarely on the twenty-fourth, twenty-first, twelfth, or thirteenth; very rarely on the twenty-eighth or thirty-fifth. During convalescence the temperature remains normal or below the normal. Violent complications, especially affections of the chest, may prevent a critical decrease of temperature taking place.

I now proceed to mention some observations of Professor Uhle *on the course of typhoid fever in aged persons*, which is sometimes very different from that observed in others. Concerning the frequency of the disease as to age and mortality, it was, in 600 cases of typhoid fever, observed in the Hospital of Leipzig during seven years, shown, that the medium mortality was 18·5 per cent.; but that it was subject to great variations according to the age of the patients. The mortality of men and women was nearly equal, viz., 18·48 and 18·62 per cent. Most cases occurred between the 18th and 24th year, and between 17 and 26 more than two-thirds of all cases happened, while the mortality in them was 16·6 per cent.; between 18 and 30 88 per cent. occurred, the mortality being 17·8 per cent. Of children there was only one in a hundred, but it must be remembered that very few children are brought into the Hospital. Over 30 years there were 11 per cent., the mortality being 30·3; over 40, there were 2·7 per cent., and the mortality 56·25 per cent. It is generally easy to show, that aged patients come from infected places, and it seems that in such persons a stronger dose of the poison is necessary to bring on the disease than in young people. Concerning the fever in the former, observations made on 15 patients past 40, showed that the temperature is absolutely lower in them than in youthful patients. If in the latter the maximum is usually 104°—106° F., and even more, in elderly patients it is never more than 103·7° F., generally only 102·8°, and this holds good for the whole course of the disease in fatal as well as in favourable cases. At the same time we have a quotidian remittent type with remission in the morning. Even in cases which end favourably, the course of the disease shows frequent irregularities. The stage of maximum temperature is comparatively short, the stage of return to the normal heat long, and protracted over several weeks. In this stage the abnormal heat lasts longer than in young patients, and approaches the maximum. Variations of the pulse are only observed at the end of the stage of return to the normal temperature, and during convalescence. While in these periods the pulse is often abnormally slow in youthful patients, it is very frequent in the aged, and in the evening generally amounts to 100 or 110. After the patients have first left their beds, the pulse is often very quick in standing (120), for more than a week. Pulsus dicrotus is very rare. Among the phenomena due to the disturbance of the nervous system, headache, delirium, sopor were wanting; but there were, especially in the stage of maximum temperature, tremor of the limbs in moving, and sensation of great weakness, which lasts for a considerable time and protracts convalescence. As to the intestines it was remarked that meteorism was very trifling, and the abdomen was only slightly sensitive. Death generally ensued at a somewhat later period, and chiefly in consequence of peritonitis and affections of the chest. At the post-mortem examinations it was found, that the ulcers heal very slowly in aged patients. In one who had died in the fourth week, there were still ulcers covered with sloughs; at the end of the eighth week, the edges were still partially undermined, and in one case an ulcer was found to be near perforation in the eleventh week.

I have especially dwelt on these points, as I think that a comparison of the results obtained in England with our experience, would be very interesting. In most acute diseases the fever in your country has such a low type as is only seldom observed here; this holds good for typhoid fever as well as for other allied zymotic affections. It is probable that the variations of temperature noted in London Hospitals will also differ from those observed here, perhaps in consequence of the administration of large doses of wine and brandy.

THE CLIMATE OF UPPER EGYPT.

Although this letter has already exceeded the space allotted to me, I wish before concluding to draw your attention to a *brochure* lately published by Professor Uhle, of this University, "On the Winter in Upper Egypt as a Climatic Remedy;" which contains much interesting matter. Professor Uhle spent the winter of 1856-57 in that country. He left Cairo at the commencement of December, and proceeded up the Nile as far as the second cataract in Lower Nubia, from whence he slowly returned to his starting-point, which he reached at the end of April. During this journey he investigated the climate, the temperature, and the moisture of the air on the Nile, and in that part of Upper Egypt situated between 26° and 24° lat. Concerning the temperature he observed on the journey up, after the 26° lat., a considerable degree of heat, which amounted on an average for four months to 5° higher than Cairo. As to the moisture of the air on the Nile, it appeared that, contrary to the view generally received, the air there is very dry, as the moisture of the river is quite counterbalanced by the proximity of the desert; it is between 26° and 22° lat., the driest which has yet been examined in any part of the world. Towards spring the dryness increases, which is probably due to the falling of the river; February is the driest and coldest month, in consequence of the north and north-west winds which prevail at that time, by which fresh air from the desert is imported into the valley.

On comparing the climate of Upper Egypt with that of Madeira, Cairo, and Algiers, the first showed the highest winter temperature. The variations in the several months are greater than in Madeira, and the daily changes of temperature are also different, as between morning and noon at Madeira there is a difference of from 9° to 11·1° only, while on the Nile it is 22·5°. But the greatest difference exists in the moisture of the air, in its absolute amount as well as in its daily changes. The highest medium monthly moisture of Upper Egypt is 5·5 per cent. below the lowest of Madeira, the general medium of the former being 23 per cent. below that of the latter. The daily variations of the moisture are also very different in both places; while in Madeira the dry time at noon differs only 9 per cent. from the moisture observed at evening, the greatest difference on the Nile, between morning and noon, amounts to 29 per cent.

As to the therapeutical value of the climate of Egypt, Professor Uhle remarks that the patients may be in the open-air the greatest part of the day, and during the whole of the winter there are only two or three days in which it would not be advisable for them to go out. The heat of the air never falls at noon below 54·5° Fah., and seldom rises above 86° Fah. Most days are fair and cloudless. The dryness of the atmosphere is in no way unpleasant. It is extremely pure, and has a very refreshing and exhilarating influence. But it should be taken into consideration that, should the patient fall ill while travelling on the Nile, he is quite helpless, and, as it is impossible to keep the temperature of the rooms different from that outside, a patient who is confined to his room is, on the Nile, exposed to unfavourable rather than to wholesome influences. Concerning tuberculosis, the Professor advises that patients should not merely spend one winter in the South, but that, instead of returning during summer to a more northern climate, they should spend it in Syria or Italy. On comparing Madeira and Egypt, special indications may be

formed according to meteorological facts; that is, patients with congestion of the lungs and dry catarrh should be sent to Madeira; anæmic persons, and such in whom the mucous membrane of the bronchi is largely secreting, to Egypt. The latter is also suited for patients who are of weak constitution, and such as suffer from diseases of the chest generally, unless hyperæmia of the brain is also to be feared. Permanent results in tuberculous patients from the north were only observed if the deposits were confined to the tops of the lungs, and the patients spent two or three winters in Egypt.

ITALY.

Rome, June 25.

MEDICAL PRACTICE IN ITALY.

If Count Cavour's death has become a Medical topic, we have to thank the English press for it, which has pronounced a somewhat severe verdict (although a *vere dictum*) against the deceased statesman's Physicians. A discussion of that kind is not likely to originate here, where people are wont to accept Fate's last decree at the doctor's hands without much questioning, though he be more than its bearer. The violent epithets so often lavished upon unsuccessful medical performances, are rarely used here, and such proverbial jokes as "killing one's patients," and "peopling the cemetery," etc., I have never yet heard from Italian lips. This may, perhaps, be owing to a lack of wit, or to a habit of politeness, although I think that it chiefly arises from a community of views existing between the average Italian doctor and his patients. Both agree upon the necessity of bleeding, not only as an antiphlogistic remedy, but as a hygienic measure, as something good *per se;* and the use of the lancet is as general as a prescription of tamarind-water or castor-oil.

Every country, has, of course, its errors and superstitions; but nowhere have I met with a greater readiness on the part of the Medical man to connive at them and to share them, than in this land of intellectual equality and moral and social fraternity. Both Medical and hygienic superstitions flourish here, and it cannot be said that they are sufficiently controlled and checked by those who are competent to do so. Fortunately bleeding is the only heroic practice too frequently indulged in. In all other respects the Italians are rather on the side of caution and "masterly inactivity." They have a great horror of large doses, and a still greater one of heroic and poisonous drugs. Laudanum is rarely resorted to, and never used as a household remedy. The blue pill, that panacea against all the blues of splenetic England, is not even known by name here, and as to calomel and corrosive sublimate, anything beyond a quasi homœopathic dose, would scandalise the pharmacist himself. I once prescribed sublimate in a case of incipient amaurosis, and as the patient, who lived in the country, could not come oftener to town to see me than once a month, I was requested by him to prescribe for a long time. I wrote accordingly, six grains of corrosive sublimate to be dissolved in one ounce of water, and of this solution fifteen drops to be taken twice a day (with a tablespoonful of syrup and gum-water). Each dose, apart from the vehicle, was, therefore, less than one-sixth of a grain; but, nevertheless, the pharmacist, who had, of course, not taken the trouble to calculate this, was frightened by the very sight of those six grains at the head of the prescription, and actually refused to make it up. "He had never been called upon to dispense such doses of sublimate." It sounds incredible, but still it is true that this unfortunate prescription was refused at three different shops, until I interfered personally and pointed out the minuteness of the dose.

This is a good trait after all. It is erring on the safe side, and I will not complain of it. Considering, too, that the Italian pharmacist is under little or no control from the authorities; that his Profession is free and open to any ignoramus who may choose to enter it; that there is not even a national Pharmacopœia in existence, and, consequently, no common standard for prime materials and magisterial preparations, one can only congratulate the public on this wholesome dread of overdoses and poisons, which is, perhaps, the result of the very system that throws so little legal, and so much moral, responsibility on the pharmacist. Most of the druggists do a thriving business, and yet I am told that even in the most frequented apothecaries' shops the vessels containing calomel and opium sometimes remain untouched for days.

Ammonia, that soother of headaches, that best of stimulants after a sunstroke, is utterly ignored in this sunny land, and only used externally for snake-bites; while tamarind-water, which, in the Tropics, is hospitably offered as a refreshment to a thirsty visitor, is gravely prescribed and discussed here as a therapeutical agent. Some days ago, one of your London contemporaries remarked that of all continental nations the Italians were most similar to Englishmen. If there be truth in that statement, which I do not deny, it certainly cannot hold good with regard to medicinal and hygienic habits; for in this respect no greater contrast can be imagined than that which exists between England and Italy. Even the Italian cookery, although apparently much more like the English than the French cuisine, is in its principles, at least, the very reverse of English cookery. Underdone meat and well-done vegetables on one side; on the other overdone meat, in fact, meat boiled to rags or into poultice, underdone vegetables and all but raw paste, rice, and other amylaceous food! Now, this is not a case for saying, "All tastes are tastes and equally legitimate," for a love for half-raw maccaroni shows a perversity of instinct, which is condemned alike by nature and science.

Rasori was an Italian; Brown an Englishman. Nor could it have been otherwise. England could never have sworn allegiance to contra-stimulism, while Italy could never have originated Brown's doctrines, and although the time of schools and systems has passed away, the two nations still cling instinctively each to the tenets of its once national faith, so that the selfsame disease which in England would probably be treated with beef-tea and those spirituous stimulants so dear to the British heart, might still be attacked, on this side of the Alps, with the lancet and the everlasting tamarind-water.

Italy, and especially Tuscany, can boast of many clever Physicians, some of whom are eminent and erudite men, quite *au courant* of the scientific achievements all over the world, and who cannot be accused of lagging behind their age—men, who have outgrown systems and schools, and who would never own allegiance to any one of them. Moreover, the Italians, like all Latin races, are notoriously deficient in what phrenological slang calls the "organ of veneration," and are naturally not much disposed to bow to any authority. But it seems that national pride amply makes up for this deficiency, and causes them to do more than justice to those in whom they see contributors to the past or present glories of their country. I have, when at Naples, heard the quaint apophthegms of the Salernitan school most unctuously expounded in the lecture-room, and the students evidently felt the prouder, if not the wiser, for it. And as to Rasori and Tommasini, their doctrines, although apparently ostracised, are still preached under a different garb, and right heartily practised; and, where they are not fully carried out, it is merely a concession made, and that reluctantly, to the ruling spirit of the age. I remember a clinical *matinée* at the Santo Spirito Hospital, in Rome, where Professor V. took occasion to open his heart on this subject. We were stopping at a certain ward (I have forgotten the name of the protecting Saint) which contained none but tuberculous patients, who occupied about one-half of the beds. "I can recollect the time," said the Professor, who was an old man, "when this ward had scarcely two or three inmates at once, and sometimes remained empty for weeks; while now it is often full, and never less than half filled, with consumptive patients. This is a curious fact which can only be explained by therapeutic innovations, there being no reason to suppose that a change of climate or an alteration of other hygienic circumstances sufficient to account for these facts, should have taken place within so short a time. But, he continued, as pneumonia has always been of very frequent occurrence at Rome, it is only rational to assume that the statistics of tuberculosis must, in the long run, be dependent on the mode of treatment habitually used for pulmonar and bronchial inflammations. Now, when I was a young man, and Rasori's principles were still professed by almost every Physician, pneumonia was cured with bleeding, and nothing but bleeding, and the bleeding was repeated until the blood let no longer showed any signs of the phlogistic crust, and it was this that prevented hepatisation and formation of tubercles."

It requires no lawyer's wit to use this plea against the

pleader, and to come to the opposite conclusion, that the present increase of tuberculous diseases in Italy may be the result of the Sangrado treatment employed by the Rasorianists against the pneumonias of the former generation—not to speak of the increase due to the improved diagnosis by the physical examination of the chest, which must have had some influence on these statistics. The spacious hall of the ground-floor was filled with a double row of beds, all occupied by persons affected with some thoracic inflammation! The mortality then was very great indeed, in spite of the repeated bleedings practised on every one of the patients, and as to the survivors, I wonder whether they were indebted to their Medical attendants for their escape from tuberculosis.

GENERAL CORRESPONDENCE.

THE COLLEGE ELECTIONS.

LETTER FROM MR. BISHOP.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg leave to express, through the medium of your columns, my cordial thanks to the one hundred Fellows of the Royal College of Surgeons who did me the honour to vote in my behalf as one of the retiring Members of Council.

It would not become me now to discuss the policy of following the advice of the late Mr. Guthrie and Mr. South respecting the infusion of new blood into the Council, which has resulted in my being made the first victim: it may, however, be remarked, that neither of these gentlemen, themselves life-members, have set the example of resigning. Moreover, it is on record, that since the Charter of 1843, when the Council first became elective, twenty-two of its members out of the fixed number of twenty-four have, up to the year 1859, either died or resigned; so that, during sixteen years, the members of the Council have been under a continual state of transition in passing from the *life* to the *elective* system.

Had I on this occasion instituted an organised canvass, or requested my friends, as others have done, to vote for myself alone, the result would have been very different.

During the period I had the honour of a seat in the Council, I am conscious of having always voted for whatever appeared to me to promote the welfare of the College, or tended to raise the character of the Surgical Profession.

In retiring from the Council, I shall always entertain that respect and esteem for its members which their characters and talents so justly merit.

I am, &c.

38, Bernard-street, July 10. JOHN BISHOP.

POOR-LAW MEDICAL REFORM ASSOCIATION.

LETTER FROM MR. GRIFFIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—You were good enough to give insertion, last week, to a letter from me, relative to the anticipated examination on Poor-law Medical Relief by the Select Committee of the House of Commons. I regret to inform you it is probable the enquiry will be postponed until next Session, as the subject may take a much longer time than was at first anticipated. I, however, should recommend gentlemen willing to give evidence not to relax in their preparation, as the communication made to me as to the postponement until next Session may be only a surmise.

The paragraph in my last letter recommending a per case payment, is, strictly speaking, not quite what I intended, as I ought to have said,—I should advise a fixed salary, triennially arranged on a calculation of the number of cases attended during the three preceding years, the amount per case to be not less than 5s. for the first 300 cases attended during any one year, and 2s. for each additional patient attended during the same time, with mileage in addition; this plan will, I believe, meet the requirements of both town and country districts.

I am, &c.

RICHARD GRIFFIN.

12, Royal-terrace, Weymouth, July 9.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JULY 3, 1861.

DR. TYLER SMITH, President, in the Chair.

DR. BARNES exhibited a model representing an everted vagina with a large fibroid tumour growing from the posterior lip of the os uteri. The tumour was also shown. The patient, a single woman, was admitted into the London Hospital. The case was believed to be one of inverted uterus. On careful examination, aided by the uterine sound, the uterus was felt to be contained within the everted vagina. The tumour was removed by transfixing the neck and tying by double iron-wire ligatures. It came away in five days, quite free from decomposition, having been preserved by being kept moist with ereasote water. The vagina and uterus returned to their normal position; the cervix and os retaining no trace of anything abnormal. Dr. Barnes observed that he had seen a case with Mr. Corner, at Poplar, in which the patient seemed moribund from discharges connected with a large fibroid tumour filling the pelvis. A few days later, under violent expulsive pains, this tumour was driven downwards, Mr. Corner freeing it from adhesions with his fingers, when it was removed. The patient perfectly recovered, and when examined by Dr. Barnes some months afterwards, presented a normal uterus and cervix. Dr. Barnes believed that this case, like the one exhibited, was a tumour of the cervix, not admitting of isolation, from its occupying and filling the pelvic cavity. He conjectured that some cases of presumed enucleation of fibroid tumours of the uterus were of this nature.

Mr. SQUIRE exhibited a

GLANDULAR CYSTIC TUMOUR,

which had occupied the lower half of the mamma. It had a hard fibrous base, and the distended cyst had obscured its lobulated character. It had increased somewhat rapidly, and was painful; and but for the nipple not having been retracted, might have been mistaken for scirrhus previous to removal. On opening the cyst, lobules in various states were seen in the form of acini, or small pedicles. Sketches of its microscopical characters were presented.

Mr. SPENCER WELLS presented an

OVARIAN TUMOUR REMOVED BY OVARIOTOMY,

on June 25, from a single woman, thirty-four years of age, in the Samaritan Hospital. The solid portion of the tumour weighed twenty pounds; some of the cysts had contained twenty-five pounds of fluid; and there had been about twelve pints of fluid in the peritoneal cavity. The patient went on remarkably well for four days after the operation, but then began to sink suddenly, and died. At the post-mortem examination signs of slight peritonitis were observed by recent lymph on the anterior surface of the liver; and there was a good deal of turbid serum present, while the intestines were greatly inflated; but there was no blood in the abdomen or pelvis. The pedicle had been cleanly divided, and it appeared that death had taken place from simple exhaustion. Mr. Wells thought the case instructive as an instance of the result of putting off the operation till too late. He saw the patient once sixteen months ago, just as she had been discharged incurable from an Hospital, and he then advised ovariotomy. But the patient had been persuaded by others to wait until almost at the point of death before submitting to it. The tumour had grown in the mean time to an immense size, while the patient's health had been broken down by long-continued suffering. Yet the operation was performed with but little difficulty; and had it been done earlier, the probabilities of success would of course have been much greater.

A paper, by Dr. TYLER SMITH, was read, giving

FOUR ADDITIONAL CASES OF OVARIOTOMY.

Case 1. — Mrs. P., aged 44, married twenty years, is the mother of one child. The tumour, which was polycystic, had existed two years; tapping had been resorted

to five times. Ovariotomy was performed by the small incision, on March 1. Extensive and firm adhesions existed. The pedicle was tied, and the ligature brought outside. She recovered without any inflammation, and was well enough to leave town in a month. The ligature has not yet come away.

Case 2.—Mrs. H., aged 35, married, the mother of five children. The tumour had existed between two and three years, and was of large size. The operation was performed on March 13. It proved, after the cyst, which was single, had been tapped and brought outside through a small incision, that it grew from the broad ligament close to the ovary, but not actually involving it. The pedicle was very broad. After tying and dividing it, considerable hæmorrhage occurred from a fissure in the pedicle behind the first ligature. A second ligature, nearer to the uterus, arrested this. Violent peritonitis came on during the night, and was treated by leeching, calomel and opium; but she died twenty hours after the operation. A post-mortem showed intense inflammation of the whole peritoneal surface.

Case 3.—Mrs. S., aged 29, mother of four children. Delivered of the last six months ago. During this pregnancy the tumour, which was polycystic, first appeared. It grew rapidly, and tapping with pressure was tried. Ovariotomy was performed on April 23, in the same manner as in the other cases. The tumour consisted of one large cyst, the internal surface of which was extensively ulcerated, and of a solid, sebaceous mass, containing numerous smaller cysts. The ilium was adherent extensively and firmly to the cyst, as was also the abdominal walls. This patient suffered from great pain for several days in the situation of the adhesions, and took considerable quantities of opium, chiefly by enemata. She was convalescent three weeks after the operation. The ligature came away in the seventh week.

Case 4.—Eliza E., unmarried. The disease had been known to have existed upwards of a year. Tapping and pressure were first tried without effect. Ovariotomy was performed on June 14. There was a large collection of ascitic fluid. The tumour itself was fibro-cystic, and very dense in structure. It was brought through an incision below the umbilicus, four or five inches in length, and the pedicle tied with two silk ligatures. The ligatures and stump were cut off as closely as possible, and the whole turned into the pelvis, with the expectation that they would be quickly enveloped in coagulable lymph, so as to prevent injury. The patient recovered without a single bad symptom, taking no medicine but thirty drops of laudanum. The wound healed in five days, and she is now convalescent.

In the paper read by the Author in February last, four successful cases were related, making in all eight cases with but one death.

Mr. Spencer Wells thought the Society ought to congratulate the President on the successful result of the cases he had brought before them; for they must assist in overcoming the exaggerated fears of ovariotomy entertained by a large proportion of the Profession. Of eight cases, only one had proved fatal. Of his (Mr. Wells') last eight cases, six had recovered, and remained well. Such a result as three deaths in sixteen cases was altogether unequalled by any other capital operation. Lithotomy in the adult, amputation of the thigh, excision of the knee-joint, ligature of any large artery, were far more fatal; the deaths after some of these operations equalling, and in some exceeding, the recoveries. He (Mr. Wells) thought the treatment pursued in the last case, with regard to the pedicle, quite unprecedented, and one which ought to be thoroughly discussed before it was imitated. The ligature had been cut off short, returned with the strangulated portion of pedicle into the abdominal cavity, and the wound closed. This was something more than a return to a procedure which had been of late years gradually abandoned. When the pedicle was tied, returned, and the ligature brought out through the wound, a channel was established for the escape of the dead putrid remains of the tissues strangulated by the ligature; but absorption of some of the putrid matter frequently occurred, and death from fever. The blood was poisoned as by injection of putrid animal matter. So the practice had arisen of keeping the strangulated portion of the pedicle outside the abdominal cavity by fixing it in the wound, whenever this could be done without too much traction upon the uterus; and this practice he (Mr. Wells) felt disposed to follow, unless further observation should prove that the plan which seems to have succeeded so well in this case may be followed with safety in other cases. The fact, however, though standing alone as it did, was of the greatest possible practical interest, and well deserved the attentive consideration of the Society.

Dr. Barnes also congratulated the President upon his remarkable success. He was anxious to make one observation upon the single fatal case. He understood that the patient, although apparently healthy, was found after death to have granular disease of the kidneys. He remembered, when a student of St. George's, that Sir Benjamin Brodie would warn against the performance of any severe operation not of imperative urgency when albuminuria existed. Where Bright's disease complicated a case, operations were exceedingly liable to end fatally. He thought it desirable in all cases to examine the urine before undertaking so serious an operation as ovariotomy. With regard to the practice of returning the stump and ligatures into the abdominal cavity, he agreed that caution ought to be observed, but could understand that the very danger apprehended by Mr. Wells was much diminished by the parts being protected from the air. If a stump was exposed to the air by being fixed externally, suppuration was inevitable; not so if returned into the abdomen, the wound being closed. There it might be at once surrounded by plastic exudation, all tendency to decomposition being arrested. Still it must be felt that the proceeding was not unattended by risk.

Mr. Baker Brown observed that the cases recorded were interesting in one or two points of view, and especially in reference to the use of opium, since in two of the cases related this drug had been given in large doses with marked benefit, whereas in the four cases formerly recorded little or no opium had been given. From these facts we might understand that each case must be treated according to its individual symptoms, and this point was fully borne out by the cases related by other observers. Pain was a greater physiological evil than the effects of opium. Mr. Brown thought that the unilocular case, where the disease was confined to the broad ligament, was not a case where extirpation should have been attempted—at any rate previous to the trial of tapping and pressure, or tapping and the injection of iodine, by either of which plans the disease would probably have been treated successfully. Mr. Brown observed that daily experience must satisfy every unprejudiced mind that ovariotomy was an operation more successful than any great operation of Surgery, and that all the old objectors must give way.

Dr. Routh believed, after having seen several cases of ovariotomy, that the plan of leaving the cut pedicle and ligature within the abdomen was very hazardous. Experiments on animals had shown that putting a piece of dead matter, even if fresh, into the abdomen, led to the development of putrid fever. That portion of pedicle between the ligature and the cut end was to all purposes dead matter. He took exception to Dr. Barnes' belief, that albuminuria was a bar to the operation. The pressure of the cystic mass in these cases obstructed circulation, and hence gave rise to albuminuria. He (Dr. Routh) would also ask Dr. Smith upon what grounds he advocated the removal of single ovarian cysts, seeing all other operators advocated, and success confirmed, the practice of iodine injections.

(To be concluded.)

MEDICAL NEWS.

Middlesex Hospital Medical College.—The distribution of Prizes took place on July 4, the Right Reverend the Lord Bishop of Labuan in the Chair.

Prizes and Certificates of Honour awarded to First Year's Students.

SUMMER SESSION, 1860.

First Prize—Mr. Anthony J. Newman, Newark, New Jersey, U.S.
Second Prize—Mr. William Dunnett Spanton, Loughborough.

Certificates of Honour.

Materia Medica.	Botany.	Practical Chemistry
Mr. A. J. Newman	Mr. W. D. Spanton	Mr. W. Eagles
Mr. Wm. D. Spanton	Mr. C. W. Pitt	Mr. A. J. Newman
Mr. W. Eagles, Aylesbury	Mr. A. J. Newman	Mr. C. W. Pitt
Mr. E. Morgan, Nantybengloz	Mr. C. P. Langford	Mr. J. W. Mason
Mr. C. W. Pitt, Malmesbury	Mr. Ed. Morgan.	Mr. W. D. Spanton.
Eq. {Mr. J. W. Mason, London {Mr. C. P. Langford, Hingham		
Mr. J. Joyce, Newbury.		

WINTER SESSION, 1860-61.

First Prize—Mr. John Ablewhite Smith, Louth.
Second Prize—Mr. Thomas Lucas, Burwell, Cambridgeshire.
Special Prize—Mr. Martin de Galwey Hurlestone, London.

Certificates of Honour.

ANATOMY.	PHYSIOLOGY.	CHEMISTRY.
Mr. Thomas Lucas	Mr. J. A. Smith	Mr. J. A. Smith
Mr. J. Ablewhite Smith	Mr. M. de G. Hurlestone, London	Mr. T. Lucas
Mr. G. H. Clifton, Burwell	Mr. G. H. Clifton	Mr. M. de G. Hurlestone
Mr. G. E. Pyle, Amesbury	Mr. T. Lucas	Mr. A. Brend
Mr. W. Curgenven, Plymouth	Mr. G. E. Pyle	Mr. G. H. Clifton
	Mr. A. Brend, Bideford	
	Mr. F. Alderson, Ipswich	
	Mr. C. J. Pyle, Amesbury	

Prizes and Certificates of Honour awarded to Second Year's Students.

SUMMER SESSION, 1860.

Æq. { Prize—Mr. Frederick William Spurgin, Stratford St. Mary.
Prize—Mr. William Norris Marshall, Tullamore, Ireland.
Prize—Mr. Joseph Harper, Great Torrington.

Certificates of Honour.

MIDWIFERY.	FORENSIC MEDICINE.
Mr. Frederick William Spurgin	Mr. Joseph Harper
Mr. William Norris Marshall	Mr. William Norris Marshall
Mr. Joseph Harper	Mr. Frederick William Spurgin
Mr. Thomas Gambier, Canterbury	Æq. { Mr. Thomas Gambier
	Mr. A. D. Hunt, Chagford, Devon

WINTER SESSION, 1860-61.

First Prize—Mr. William D. Spanton.
Second Prize—Mr. Thomas Joyce.

Certificates of Honour.

MEDICINE.	SURGERY.	ANATOMY.
Mr. W. D. Spanton	Mr. W. D. Spanton	Mr. W. D. Spanton
Mr. Thomas Joyce	Mr. C. W. Pitt	Mr. E. Morgan
Mr. C. P. Langford	Mr. C. P. Langford	Mr. Thomas Joyce
Mr. W. Eagles	Mr. Thomas Joyce	Mr. M. de G. Hurlestone
Mr. E. Morgan	Mr. E. Morgan	Mr. W. E. Lee, Bideford
	Mr. W. Eagles	Mr. Charles W. Pitt
		Mr. C. P. Langford
		Mr. W. Eagles
		Mr. J. W. Mason

PHYSIOLOGY.	PATHOLOGY.
Mr. William D. Spanton	Mr. William D. Spanton
Mr. Charles Wightwick Pitt	Mr. Thomas Joyce
Mr. Charles P. Langford	Mr. Charles W. Pitt
Mr. Thomas Joyce	Mr. Charles P. Langford
Mr. William Edward Lee	Mr. Edward Morgan
Mr. Edward Morgan	Mr. Woodfield Eagles.
Mr. Woodfield Eagles	
Mr. John Wallis Mason	

Prizes awarded to Third Year's Students.

PRIZE IN CLINICAL MEDICINE—Mr. Joseph Harper.
FIRST PRIZE IN CLINICAL SURGERY—Mr. Frederick Wm. Spurgin.
SECOND PRIZE " " —Mr. Joseph Harper.
GOVERNOR'S PRIZE—Mr. Charles Henry Fowler.
For the best Reports in both Clinical Medicine and Clinical Surgery.

Prize offered by the Medical Society for the best Paper of the Session.

Mr. Charles Henry Fowler.

Honorary Certificates of General Good Conduct and Diligence.

Mr. C. H. Fowler	Mr. John Hursley	Mr. J. M. Phillips
Mr. Thomas Gambier	Mr. Joseph Harper	Mr. F. W. Spurgin
Mr. William Garneys	Mr. Wm. N. Marshall	Mr. Charles F. Sutton
Mr. Albert D. Hunt		Mr. Richard P. Tyley.

APPOINTMENTS.

DAVIES.—Mr. Samuel Davies, M.R.C.S., L.S.A., late of Glasbury, has been elected Medical Officer to the Pembridge district, Kington Union, Herefordshire.

FERNIE.—Mr. Andrew Fernie has been elected Surgeon to the Dispensary, Barnstaple, Devon.

WILKINSON.—John Sebastian Wilkinson, M.R.C.S. Eng., has been appointed Surgeon to the St. George's and St. James's Dispensary, King-street, Golden-square, and Mount-street, Grosvenor-square.

WILLETT.—James Willett, L.S.A. Lond., of Great Budworth, Northwich, Cheshire, has been appointed additional Medical Officer to the Northwich Provident Dispensary.

WILLIAMS.—Dr. D. M. Williams has been appointed Honorary Assistant-Surgeon to the Liverpool Infirmary for Children.

DEATHS.

CHAMBERS.—Recently, Charles Chambers, Surgeon, R.N., on the Retired List (Seniority, July 9, 1807.)

DAVEY.—May 14, Robert Davey, of Shere, Guildford, Surrey, L.A.H. Dublin, aged 66.

FITZGERALD.—July 1, at West Broughton, Sudbury, Derbyshire, of consumption, John Gerald Fitzgerald, aged 36, M.R.C.S. Eng. 1855, Ledwich School, Dublin.

HARKAN.—July 6, Patrick Harkan, of Upper Sackville-street, Dublin, L.K.Q.C.P. Irel., aged 82.

JOHNSON.—July 7, William Eagles Johnson, of Dudley, Worcestershire, M.R.C.S. Eng., L.S.A., aged 42.

MESSER.—July 7, at Abbotsford Park, Morningside, Adam Messer, of Blainslie, Scotland, F.R.C.S. Edin.

RICHARDSON.—June 28, at Brentwood, Essex, Lawrance Thomas Johnson Richardson, M.D., aged 91.

ROBINSON.—July 4, John Marshall Robinson, of Bank House, Bolton-le-Moors, Lancashire, F.R.C.S. Eng. M.R.C.S. and L.S.A. Lond., aged 60.

ROFFEY.—February 28, of remittent fever, at Namegus, Cape of Good Hope Station, Edwin Thomas Roffey, of Woolwich, Kent, M.R.C.S. Eng., Assistant-Surgeon on board of H.M. screw steam sloop, *Wasp* (Seniority April 25, 1860), aged 27.

SCOTT.—Recently, Robert J. Scott, M.D., Surgeon R.N., on Retired List (Seniority May 1, 1844).

SOMERVILLE.—Recently, George H. Somerville, Assistant-Surgeon R.N., on the Retired List (Seniority August 12, 1836).

STEVENSON.—March 17, at Auckland, New Zealand, Andrew Stevenson, late of Kilmarnock, Scotland, Student of Medicine.

SWANN.—July 3, at Weedon, Northamptonshire, Edward Swann, late Staff-Surgeon to the Military District Prison, at Weedon, formerly Assistant-Surgeon in the Royal Navy, and afterwards Ordnance Surgeon, aged 83. The deceased gentleman served in the Walcheren Expedition, and at the seige of Flushing.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 6, 1861.

BIRTHS.

Births of Boys, 870; Girls, 877; Total, 1747.
Average of 10 corresponding weeks, 1851-60, 1508·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	517	526	1043
Average of the ten years 1851-60	533·7	493 2	1026·9
Average corrected to increased population..	..	..	1129
Deaths of people above 90	..	1	1
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West'.. ..	463,269	..	10	2	2	12	5	11
North ..	618,181	1	5	5	3	7	6	10
Central ..	377,794	..	2	3	2	8	4	7
East	570,898	3	5	8	1	12	9	18
South ..	772,892	..	3	7	7	18	7	15
Total.. ..	2,803,034	4	25	25	15	57	31	61

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 614 in.
Mean temperature	59·7
Highest point of thermometer	76.3
Lowest point of thermometer	48·7
Mean dew-point temperature	50·1
General direction of wind	S.W·
Whole amount of rain in the week	0·17 in.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Fowler's letter arrived too late for insertion this week.

Dr. Marcet's paper on Death from Chloroform will appear in an early number.

Dr. Williams's paper will be inserted as soon as possible; but many papers received before his are still waiting for insertion.

Mr. H. Smith's paper has been unavoidably delayed for several weeks. It shall appear in an early number.

Juvenis.—The three candidates for the two Assistant-Surgeoncies at King's College Hospital, are Mr. Henry Smith, Mr. Price, and Mr. Mason.

Mr. Brown.—We believe that the Lord Chancellor, Lord Westbury, late Sir Richard Bethell, is the son of a Physician.

Obstetricus.—According to the *supposed* quotation from Naëgele given by our contemporary, delivery may be expected to take place exactly three months and seven days before conception. Gentlemen would do well to study German before they quote it.

Fœtal Auscultation.—We have to acknowledge a letter in capital English, from Dr. Ferdinaud Reesz, Tribunal Physician at Boxberg, in the Grand Duchy of Baden, in reply to some observations of Dr. Francis Adams, on Fœtal Auscultation, in our No. for July 21, 1860. Since Dr. Adams has been removed from all earthly controversy (of which Dr. Reesz does not seem to be aware), we may content ourselves with presenting the chief fact in Dr. Reesz' letter, which is this:—Whereas Casper, the chief Medico-legal authority extant, following Scanzoni, holds that the heart's sounds are not distinctly heard before the twenty-fourth week of pregnancy, Dr. Reesz gives the particulars of a case in which during the patient's first pregnancy, auscultation was practised early and frequently, and the placental sound, as well as the narrowly-limited and circumscribed *tic tac* of the fœtal heart, were distinctly heard at the end of the fifteenth week of gestation, or 175 days before labour at full term. In a subsequent pregnancy of the same patient, the fœtal heart was heard in the sixteenth week. Dr. Reesz appears much in the habit of obstetric auscultation, and practises it in most cases where unmarried women complain of obstructed menstruation. In one case he heard the heart sounds through the patient's clothes.

A Query.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A subscriber, who has a patient affected by insanity, whose property is not of greater amount than £40 per annum, would feel obliged if you could afford any information as to the disposal of such patient. I am, &c. Αγαπη.

Minor Surgery.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you allow me to set myself right with the reviewer of my "Manual of Minor Surgery" in your last number? I find I am taken to task on the supposition that I advise compression for an acutely inflamed breast, whereas the sentence quoted by the reviewer himself shows that I hold that strapping "is one of the most efficient modes of giving support to an inflamed or enlarged breast"

If the reviewer will read to the end of the paragraph in my book, he will find it stated that "if compression is desired as well as support," etc., showing that I make a difference between the two methods, as is also illustrated by the wood-cut. I am, &c.

31, Sackville-street, July 10. CHRISTOPHER HEATH.

Another Cancer Curer.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following example of the advertising baits of Cancer-curers of the present day may interest your readers:—

"Cancer and other Tumours Eradicated without Cutting, Caustics, or Pain.—Dr. Smith, West Grove House, Blackheath Point, near London. Resident Patients received. Consultations by appointment. Treatment by correspondence, and remedies forwarded."

I find no such Dr. Smith in the "Directory." Perhaps some of your Blackheath subscribers may tell us something about him.

I am, &c. NO DOCTOR, PLAIN MR.

Allopathy.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your journal of July 6, the reviewer of "The Errors of Homœopathy," seems to me, disregarding the context (and totally indifferent to the fact that certain words from customary usage come to convey a meaning not always too strictly in accordance with their derivations), to imply my acceptation of the title of "Allopathic" Physician.

Allow me to correct this. Orthodox practice—our practice—being commonly designated by globulist writers as "Allopathic," this term required, to Homœopathic readers at least, some connection as well as repudiation. Hence the sentence which offends, but which acquits itself,—"Allopathic practice, by which term we mean the practice of Orthodox Medicine, is not unfrequently credited with a mortality 'not all its own.'"

Suppose it had run thus—A Doctor's vocation, by which term we mean the vocation of a Physician, is not unfrequently dangerous in character. This does not at all imply that all Doctors are Physicians (which would be untrue, although all *practising* physicians are from the nature of their profession teachers—doctors—of Medicine), on the contrary, the second phrase would be read by anyone with ordinary intelligence as a correction of the first.

Trusting you will do me the favour to insert this,

I am, &c.

Chester-terrace, Eaton-square, July 8. BARR MEADOWS.

[We insert Dr. Meadows' explanation, but still insist that it is very unwise to accept the term Allopathy, or "allopathic practice," as equivalent to "the practice of Orthodox Medicine."—ED.]

Chloroform in Delirium Tremens—Is its Employment Justifiable?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The letter from Dr. Dobbie, recording a case of death under chloroform admiuistered for delirium tremens, which appeared in your number for the 29th of June, seems to my mind to open up a grave question for consideration. That questiou is, whether it is expedient, or even justifiable, to use the influence of chloroform to calm the paroxysms of the mania of druukards? In the numberless cases for which chloroform is now administered, delirium tremens can hold no very high position, and yet we find already recorded four or five deaths resulting from its employment in this affection. I stated some time ago, in a paper read before the Western Medical and Surgical Society, my opinion that alcoholism is of all states of the system the least favourable for the admiuistration of chloroform, and the lately-recorded case only strengthens this view.

Very seldom, when the anæsthetic is given to a "hard drinker," does it produce its effects in their usual uniform course. Usually a large quantity is required to produce insensibility, very many inspirations are taken before there is any apparent effect; and then there is a sudden change from a partial to a very complete state of insensibility, from a previously quiet breathing to a loud stertor.

In looking over a record of thirty-three cases of death from chloroform which have occurred since those recorded in Dr. Snow's posthumous work, I find four iu which it is distinctly stated that the patients had been inveterate driukers. In all these cases a noticeable circumstance was that there was sudden and severe muscular excitement with suffusion of the countenance, instead of the pallor which usually betokens danger. The mode of death was, however, twofold:—

1. The excitement was produced suddenly, and death occurred at a very early period of the inhalation. Thus, in one case it is recorded that only three inspirations were taken when the man writhed and fell dead. (Case occurring at the London Hospital.)

2. In the majority of cases death occurred after the inhalation had been prolonged over a considerable period without producing any sensible effect. In one case thirteen minutes elapsed—stertor then ensued; and while the patient was being arranged for the operation, death took place.

I would not, of course, assert that chloroform should be forbidden all those who have led intemperate lives; but nevertheless, I think that its employment should be accompanied with the greatest caution. In cases of delirium tremens, however, I consider that it is decidedly contra-indicated. I am, &c.

70, Brook-street. A. ERNEST SANSOM, M.B.

COMMUNICATIONS have been received from:—

Professor SIMPSON; Dr. R. LEE; M. CLAUDE BERNARD; Dr. F. HAWKINS; Dr. MARCET; Dr. ANDERSON; Mr. H. SMITH; Dr. WILLIAMS, Swansea; Dr. SANSOM; Mr. SOELBERG WELLS; Dr. BALL; Mr. C. HEATH; Dr. BARR MEADOWS; Mr. WILLIAMS; Dr. FOLEY; Mr. FOWLER.

APPOINTMENTS FOR THE WEEK.

July 13. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

15. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

16. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

17. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

18. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

19. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

SAMARITAN FREE HOSPITAL LECTURES, 4 p.m. Dr. Greenhalgh "On Indications for Turniug, the Forceps, Craniotomy, and the Cæsarean Section."

EXPECTED OPERATIONS.

King's College Hospital.—The followiug Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Excision of Knee; Removal of Epithelial Growth from Mouth; Removal of Tonsils; Removal of Warty Growths from Anus; Openiug large Chronic Abscess in the Thigh.

ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture XVII.
ON ANIMAL HEAT.

Summary: The Production of Animal Heat usually viewed as the Result of a Combination between the Oxygen contained in the Blood and the Carbon which exists in the Tissues—Lavoisier's Opinions on this Point—Modern Modifications of these Views—The Idea of a Combustion still retained—The Explanation unsatisfactory—The Heat produced by the Chemical Phenomena which take place within the Body probably absorbed by Physical Changes—Opinions of MM. Regnault and Reiset on this Subject—The State of Blood in the Veins depends upon the Physiological Activity or Inertia of the Tissues through which it passes—In the Muscles the Absorption of Oxygen coincides with the Production of Heat; in the Glands the reverse is the Case—Circulation, however, accelerated in both Cases—A Mechanical Cause of Heat thus brought into Play—The Results of the Division of the Sympathetic Nerve lead to the same Conclusions—Experiments on Artificial Diabetes.

Gentlemen,—In our last Lecture we directed your attention to the chemical changes which nervous influence produces in the blood. It has now, we believe, been fully proved that the various proportions of oxygen and carbonic acid contained in this fluid entirely depend upon the physiological state of the tissues through which it flows. We will devote our time to-day to certain theoretical views on the temperature of living beings, which may be considered as a corollary of the preceding demonstration. You are aware, in fact, that the characteristic properties of venous blood are derived from the exchange of oxygen for carbonic acid, which is carried on in the depth of our tissues; you are aware at the same time that the majority of physiological observers still retain the opinions of Lavoisier on the production of animal heat, making, of course, a proper allowance for the progress of science in our own days; he believed this property to be the result of a combustion which took place in the lungs; this notion is still maintained, with an important modification, however; it is now admitted on all sides that the combination of oxygen with the hydrogen and carbon of our tissues does not occur in the pulmonary apparatus, but within the tissues themselves; such, with respect to calorification, is the generally-received opinion at present. We hold it, however, to be at variance with positive facts, some of which entirely modify, if they do not utterly overthrow it: allow us to enumerate the most important of these.

It cannot, of course, be denied, that a variety of chemical phenomena take place within the body, and that all reactions of this nature are productive of heat. But there arise at the same time other manifestations of vital activity, which, if they do not entirely neutralize the heat produced in this manner, absorb, at least, a large proportion of it. We know, for instance, that physical changes of every description are perpetually going on in the economy; that solids are converted into liquids, and these again into vapours, and the amount of caloric absorbed in this manner is probably equal, if not superior, to that which is derived from the chemical reactions of life. We might, if necessary, quote the highest scientific authority in support of our opinions. In their interesting and valuable researches on the temperature of animals, MM. Regnault and Reiset distinctly state, after discussing the objections which we have just alluded to, that it will never be possible to calculate the quantity of animal heat engendered within the economy from the amount of carbonic acid thrown off by the lungs, even after taking into consideration the water produced by the combustion of hydrogen during the respiratory process; and that if, in any case, the results obtained should tally, the coincidence must be viewed as fortuitous. Let us now proceed to examine the cases in which this coincidence does not exist, and which, on the contrary, lead to results entirely opposed to the theory of combustion, viewed as the exclusive source of animal heat.

We have shown you that the chemical composition of the blood varies according to the state of the tissues from which it is derived; in muscles, when they are made to contract under galvanic influence, the vessels are distended, and the temperature rises. All this perfectly agrees with Lavoisier's theory, since, in this case, the venous blood is of a purple colour, and contains a large proportion of carbonic acid; the oxygen of the blood has, therefore, entered into combination with the carbon of the muscular tissue. But the reverse takes place in glands; when these bodies are raised from their torpor by the application of the galvanic stimulus, the local circulation is accelerated, and the temperature rises, but the blood which passes into the veins is of a bright scarlet colour, contains a large amount of oxygen, and resembles in its appearance arterial blood; while, in a state of rest, this fluid is purple, and contains less oxygen, and more carbonic acid. Now, the temperature being higher in the first case than in the second, the degree of animal heat seems to be in an inverse ratio to the quantity of carbonic acid produced; evidently combustion, under such circumstances, has no connexion whatever with the temperature of the blood.

The only coincidence which exists between these phenomena is an acceleration of the passage of the blood through the vessels, whether muscles are galvanized, or glands excited; and in either case, an augmentation of temperature is the result. We now meet with a physical source or heat, namely, friction, which, before Lavoisier's time, was generally believed to be the principal agent of calorification in the living body; without absolutely rejecting, therefore, the influence of chemical phenomena in the production of animal heat, we are of opinion that the part usually attributed to such causes has been considerably exaggerated, and that mechanical phenomena are more directly concerned in this important function of life.

The effects produced by dividing the cervico-cephalic branch of the sympathetic nerve evidently lead us to a similar conclusion. When the ramifications of the system which spread to the outer ear in rabbits, are separated from the centre of nervous action, the vessels are dilated, the blood flows abundantly to the part, and circulates with greater rapidity than usual: it passes in an arterial state into the veins, having scarcely had time (if we may thus express ourselves) to deposit its oxygen in the tissues; and the ultimate result of all this process is an augmentation of temperature in the affected region. If, on the contrary, we galvanize the peripheral extremity of the divided nerve, the vessels contract, the circulation is slackened, the blood loses its oxygen and acquires a dark colour on passing into the veins; and at the same time, the temperature sinks below its ordinary level. How can such facts be made to agree with the theory of combustion? Heat is produced, when the chemical process is impeded; and when, on the contrary, the whole amount of oxygen contained in the blood has been absorbed, the result is a loss of warmth. There is, however, no difficulty in accounting for this apparent contradiction; the passage of the blood through the vessels has been retarded, and the friction of this fluid against the vascular parietes diminished; in spite, therefore, of the increased activity of chemical phenomena, the production of caloric has undergone a check, from the temporary diminution of a powerful cause, which we consider as the main source of animal heat.

The nervous system, therefore, controls entirely this important vital function; on dividing the sympathetic nerve the temperature of the corresponding parts increases; on galvanizing it, the temperature falls, the vessels being enlarged in the first case, and contracted in the second. Both these manifestations must be viewed as active phenomena, however difficult it may appear to the physiological student to account for the active enlargement of a hollow cylinder; but if this were not the case, how could we produce this effect by the application of galvanism to certain nerves? how could the galvanic current modify the local circulation of a given region, for the heart's action remains the same as before, and is equally distributed over all parts of the body?

We are now going, gentlemen, to prove, by direct experiments our assertions on the subject of diabetes, in one of our preceding Lectures.

The rabbit now placed before you has undergone the operation already described; a wound has been inflicted with a

sharp-pointed instrument upon the anterior wall of the fourth ventricle. The animal is paralysed, as you perceive, it lies on one side and is unable to move; this, however, is an accidental consequence of the operation; it is, in fact, rather difficult not to create a slight hæmorrhage on the wounded point; and in this manner both paralysis and diabetes are simultaneously produced.

The animal's urine has been collected before and after the experiment; we will now test them with the ordinary reagents, and you will find that sugar exists in the latter, but not in the former.

(The experiment is performed, and fully succeeds.)

This disease, gentlemen, never arises spontaneously in the lower animals; we sometimes, however, meet with polydipsia; an affection which can also be artificially created, by acting upon a higher region of the encephalic mass. The result is an engorgement of the abdominal circulation; the intestines grow red, tumefied, and vascular; and at the same time, the urinary discharge is poured forth more abundantly than in the healthy state.

ORIGINAL COMMUNICATIONS.

CLINICAL MIDWIFERY.

By ROBERT LEE, M.D., F.R.S.
Obstetric Physician to St. George's Hospital.

(Continued from page 404, Vol. II. 1860.)

Case 679.—At 9 a.m., January 4, 1855, I was called to the British Lying-in Hospital to see a patient in labour who had hard extensive cicatrices of the vagina from sloughing in a former confinement. She had been delivered two years before in Westminster with the forceps. I believe the child was dead. I saw her at one o'clock, and learned that the labour had commenced the evening before. The vagina was nearly closed up behind with a thick firm band, so that there was no prospect whatever of the head passing through this contracted part, and there was danger of rupture of the uterus from the violence of the pains. There were violent incessant efforts to force the head forward. I opened the head with the perforator, and extracted it slowly. The cicatrix yielded with great difficulty. The patient recovered favourably. After the most careful consideration, it was not considered justifiable to attempt to divide the cicatrix with a knife.

Case 680.—On January 8, 1855, I saw a lady, aged 45, who had been ten years married, and had never been pregnant. An ovarian tumour had commenced six years before, and had made considerable progress, about which I had been a short time before consulted, when there was some suspicion of pregnancy having taken place. In the course of the afternoon of this day pains like those of labour had commenced. Her Medical attendant had been summoned, and on examination found a bag of membranes protruding through the os uteri. He ruptured them, and a large quantity of liquor amnii escaped. No part of the child could be felt. At 7.30 p.m. I examined, and found a great coagulum of blood, part of which was in the vagina and part external. On removing this, I felt a portion of the placenta hanging through the os uteri, which was so rigid that the hand could not be passed. The presentation of the child could not then be ascertained. The patient being extremely weak and delicate, and incapable of sustaining the effects of long and severe hæmorrhage, immediate delivery seemed necessary. After giving some brandy, I passed the hand into the vagina, which gave intense pain. Then two fingers, the fore and middle, were introduced through the os uteri; an arm of the child was felt, and nothing else could be reached by any effort that could safely be made. As the fœtus was known to be premature, I drew down the arm, thinking I might succeed in getting it to pass down, as I had seen in other cases. But in this I did not succeed, as the os uteri would not dilate, and there seemed a risk of pulling off the arm had I proceeded. I therefore withdrew my right hand altogether, and passed the left into the vagina, and forward in the direction of the feet, and two fingers through the os uteri, which was now more dilated, and with these ultimately succeeded in getting hold of a lower extremity and turning the child. The patient recovered favourably, and is, I believe, still alive.

Case 681.—On February 25, 1855, at 6 a.m. I was in attendance upon a lady in her fourth or fifth labour, who was suddenly seized with symptoms which appeared to threaten rupture of the uterus. The head of the child was in the pelvis, and I expected that in a short time it would be safely expelled. Suddenly the patient complained of violent cutting pain in the uterus or the left side, totally different from the ordinary pains of labour, which immediately ceased. Sickness followed, but the head did not recede. Dr. Henry Davies saw the patient with me, and we agreed that immediate delivery was necessary by the perforator and crotchet. This I did without loss of time, and the patient rapidly recovered and has since been safely delivered of a living child without any artificial assistance being required.

Case 682.—On April 11, 1855, I was called to a case of labour in which an arm of the child had presented, and repeated and long-continued unsuccessful efforts had been made to turn. I found the thorax low in the pelvis, and the uterus so firmly contracted round the body of the child that I durst not renew the efforts to turn. I pressed down the arm, passed up the crotchet over the lower part of the abdomen, and in a very short time brought out the pelvis and lower extremities. The operation of turning was performed with the crotchet.

Case 683.—On April 29, 1855, at 6 a.m., I was called to a case of protracted labour in Rupert-street. It was the first labour. In a note the Medical attendant said, "Will you kindly come, and bring the forceps?" I found the os uteri not more than half dilated, the anterior part was thick and undilatable, pressed down before the head with the pains which were strong and regular. Progress very slow. I recommended patience, but the patient had none,—time was absolutely necessary. The forceps could not be employed. I did not dream of the operation of turning. Having waited twelve hours, and it being evident that the head would never pass through the os uteri, which was still only partially dilated, and the forceps being inapplicable under the circumstances, and the strength of the patient being much exhausted, the head was opened with the perforator and extracted with the crotchet, and in doing this considerable time and labour were required. She recovered.

Case 684.—On May 9, 1855, I was called by a Medical Practitioner to see a lady near Camden-town, whose sixth labour had commenced on the morning of May 8. It had continued the whole day, and at 9 p.m. the head of the child was firmly impacted in the brim of the pelvis, and there had been no advance for many hours. The top of the head only could be felt. Symptoms threatening the greatest mischief were present, and immediate delivery was obviously necessary. I soon opened and extracted the head. In the first labour, five years before, the child had been delivered by the same method after most protracted suffering. In the second labour the child was premature, and it passed without any artificial help, after the labour had continued many hours. In the third and fourth labours, the children being very small, were passed alive, their heads being greatly bruised. A six months' child was afterwards expelled dead. This patient would not submit to have premature labour induced.

Case 685.—At 7½ a.m. on May 28, 1855, I was called to a case of protracted labour in Rathbone-place. It was the first labour, and had continued upwards of twenty-four hours. The patient was 30 years of age and extremely corpulent. Just before my arrival at the house the child, very large, had been extracted alive with the forceps. The perineum, I was informed, had been lacerated; but to what extent an opportunity of ascertaining was not furnished. I made pressure over the abdomen, and in a quarter of an hour the placenta came away.

Case 686.—On July 1, 1855, Mrs. —— being in the 7½ month of pregnancy, and whose pelvis was distorted, I had resolved to induce premature labour on July 4. It was agreed that she should then be near Hanover-square. On June 23, while at a great distance from London, without any accident, the liquor amnii began to escape, and labour pains commenced not very long after. Before I could see the patient a premature child had been born alive after the head had been long compressed in the brim of the pelvis. The forceps had been applied, and great force used in the first labour, with most injurious consequences to the mother.

The child was dead. In the second labour I had induced premature labour at the 7½ month, and the child was born alive and reared. About the eighth month of the next pregnancy labour came on spontaneously, and the child was still-born by the natural efforts.

Case 687.—On September 8, 1855, I was requested to see a lady who had been upwards of forty-eight hours in labour with her first child. It was stated by her Medical attendant that there had been no progress during twelve hours. The os uteri was not fully dilated; the head had not entered the brim of the pelvis. Pains were gradually declining in strength. The discharge was very offensive, and there was every reason to believe that the child was dead. It was considered by us necessary, without any reference to the vitality of the child, that the mother should immediately be delivered. After perforation, great and long-continued force was required to extract the head. The recovery was unfavourable, and I regretted that the labour had been allowed to continue so long. This patient had long been in a peculiarly nervous condition. This has since entirely disappeared, and she has been delivered safely of a living child.

Case 688.—Mrs. M——, aged 28, September 22, 1855. Two years ago was confined with her first child at a distance from London. It was delivered with instrument, and was still-born. Was in labour from Saturday till Tuesday morning. The pains had then ceased. Recovered favourably from the labour, and is now seven months pregnant. There is no bending of the spine nor of the bones of the lower extremities, and her appearance is very healthy. Is looking remarkably well. The question now is, shall she be allowed to go to the full period, or have premature labour induced. Mr. M—— had examined the pelvis after her previous confinement, and his opinion now is that she may safely be allowed to go to the full period. I examined the pelvis and could not with the finger introduced completely reach the promontory of the sacrum. I infer from this that there is no want of space between the sacrum and symphysis pubis. On the sides of the pelvis there is abundance of room, and the tuberosities of the ischia are at the usual distance from one another, as far as I can judge. On this account I would say most distinctly that no interference ought to take place. I entirely coincide with Mr. B—— on this subject, and I would expect, unless the child should be unusually large, it will pass in a second labour without more than the usual efforts of the uterus.

Case 689.—On October 17, 1855, Dr. Parkes, of Great Marlborough-street, requested me to see a lady who had been a great many hours—upwards of sixty—in her first labour, and had become completely exhausted. The head had not passed through the brim of the pelvis, the soft parts were greatly swollen, and the catheter had been repeatedly required. We had no doubt that immediate delivery was required, and that the only method of doing this with safety to the mother was by opening and extracting the head. Great and long-continued force was required to accomplish the delivery, but the patient recovered.

Case 700.—Sunday, 10½ a.m. November 11, 1855. Mrs. F., in the seventh month of pregnancy, was seized with uterine hæmorrhage at 4 a.m. on Wednesday week. It was not profuse. There has been more or less discharge ever since, and there has been severe headache, for which leeches have been applied. She is extremely nervous, almost hysterical. I examined, and found the os uteri a little open; could not feel the placenta, but from the thick state of the uterus in front inferred that the placenta was in the immediate neighbourhood of the cervix or over it. I recommended Mr. Pollard to keep his patient very quiet and cool, in the horizontal position, watching carefully, and if hæmorrhage returned profusely, to pass the hand and turn the child if the placenta was found at the cervix, and rupturing the membranes if it was not. Mr. Pollard agreed to remain strictly on the watch, and not to delay interfering too long. A fatal case of placental presentation, which had occurred in the neighbourhood not long before, had created terror in the minds of the patient and her husband. On the 12th, he wrote to inform me that, "true enough, the placenta entirely covered the os, hæmorrhage came on early this morning, and as I found the portals not very rigid, I was able to pass my hand up and turn, I am happy to say without any very extensive hæmorrhage. The child had been dead some time."

Case 701.—December 4, 1855. Mrs. ——, of Islington. First labour; had continued sixty hours. Os uteri then rigid, and not more than half dilated. Pulse 160; tenderness of abdomen. Exhaustion; pains gradually subsiding. No chance of the process being completed by the natural efforts. Discharges very offensive. Child probably dead. Opened the head and extracted it with less force than in many of the previous cases. Placenta adhered, and required to be removed by the introduction of the hand into the uterus. Recovered favourably.

Case 702.—At 11 o'clock on Christmas-day, 1855, I was called to a patient in her fourth labour at Park-village West; the membranes had burst at 9 a.m., little active contraction of the uterus followed. The presentation was soon ascertained by the Medical attendant to be preternatural; an arm was felt. I passed my right hand readily into the vagina, and found the os uteri so imperfectly dilated, and so rigid, that some time was required to overcome the resistance. The head of the child was at the forepart of the uterus bent up upon the body. A difficulty was experienced in passing the right hand along the front of the thorax and abdomen. I withdrew the right and substituted the left hand, and with this, after an hour, succeeded in drawing down a foot. A tape was passed around the ankle, and then the turning was soon safely completed.

Case 703.—On April 13, 1855, I saw a lady near Camden-town in the second month of pregnancy, who, after feeling some uneasiness about the uterine region, was seized with symptoms of sudden sinking. The countenance pale, the pulse rapid and feeble, and all the other signs of internal hæmorrhage. The uterus was enlarged, but not greatly, and closed. On the left side there was an enlargement felt, which I thought was exterior to the uterus, and in the situation of the left ovarium. I considered it probable that this was a case of internal hæmorrhage, from tubal gestation. It went on rapidly to a fatal termination, and a post-mortem examination was objected to by her husband.

Case 704.—On Tuesday, October 6, 1846, Dr. —— called, and requested me to see a patient in labour, who resided near Drury-lane. He informed me that she had previously been delivered of six children, who were all born alive, at the full period, and without any difficulty. Labour pains on this occasion, he said, had commenced on the Thursday before, when the liquor amnii escaped. The midwife had not been sent for till the Saturday, and he stated that the pains had been feeble until the Monday evening, when they became very severe and almost constant, with occasional vomiting. The patient complained of great exhaustion. Dr. —— told me he saw her about midnight, and that there was then nothing urgent, and her general appearance favourable; pains recurring frequently but sharp, frequent vomiting; os uteri high up, rather puffy, dilated to the size of a crown; head presenting, but so high up that it was necessary to introduce the hand into the vagina to make out the state of the case. The catheter had been passed, and a little water drawn off. Dr. —— waited for some time, and it appeared as if the parts would yield. He saw the patient again at 7 p.m.; os uteri rather more dilated, but not widely, but softer; then saw her again about 10 or 11, os uteri more dilated, tongue furred, pulse feeble; a good deal of complaint of exhaustion; face presenting; forehead to the right ileum. When I arrived I found the patient delivered, the child lying dead upon the table, and the patient apparently dying. Mr. ——, an inexperienced practitioner, and another young man, were present, and the former had delivered by turning. I was horrified when I heard that such an operation had been performed. Liquor amnii discharged four days, labour long continued, face presenting. Dr. —— had spoken of using the long forceps. He thought the perforator and crotchet could not be employed when the face presented. I believe he had at this time never seen the operation of craniotomy performed. On the morning of the 8th, Dr. —— called and wrote upon a card that the patient had died twenty-four hours after delivery, with symptoms of ruptured uterus. A post mortem examination could not be obtained, and a coroner's inquest was not held.

Mr. Henry Lee, on resigning his office of Surgeon to King's College Hospital, has been elected an Honorary Fellow of King's College.

ON DEATH FROM CHLOROFORM.

By W. MARCET, M.D., F.R.S.,
Assistant-Physician to the Westminster Hospital.

The case of death from chloroform, reported by Dr. Dobbie in the *Medical Times and Gazette* for the 29th of June, induces me to offer your readers a few practical observations on this subject.

When chloroform is inhaled, and consequently brought into contact with the air-cells of the lungs, it passes rapidly into the blood, by means of which it is carried to the brain. If the administration of the anæsthetic agent be suspended, the chloroform will be eliminated from the body by the respiration, each inspiration displacing most of the vapour contained in the blood exposed by the lungs to the action of air during that inspiration. The elimination from the blood of any very volatile substance possessed of a stable chemical composition may be considered, as a rule, to take place through the lungs. This might have been anticipated by a consideration of the displacement of the carbonic acid of the blood by the air inspired, and has been placed beyond doubt by a well known beautiful experiment of Claude Bernard, where an aqueous solution of sulphuretted hydrogen being injected into the blood of a dog, the animal in the course of one or two minutes expires the whole of the poisonous gas. Messrs. Lallemand, Perrin, and Duroy have shown experimentally that this law is applicable to chloroform, and consequently there is not the slightest doubt that when blood contains chloroform it is removed therefrom by means of respiration.

If the air inspired be pure, the displacement of chloroform from the blood in the lungs will be very great; if this air should contain chloroform the displacement will be less, just as when air containing a large proportion of carbonic acid is breathed, the removal of the carbonic acid of the blood is checked. When a patient begins to inhale chloroform, a portion is absorbed by the blood, the remaining is expired; but shortly afterwards, in addition to the expiration of that part of the chloroform, which has not been taken up by the blood, a certain quantity of that which has been absorbed is also ejected, being displaced by the air mixed with the chloroform inhaled. At this stage, however, there is still an accumulation of the anæsthetic agent in the blood, more being taken into the circulation than given out; gradually complete insensibility is produced, and the handkerchief is removed from before the face of the patient; he now begins ridding himself rapidly of the chloroform, and recovers consciousness, unless more of the anæsthetic agent be exhibited. By the careful administration of chloroform the state of insensibility may be kept up for a considerable length of time; during this period it is obvious that the accumulation of the vapour in the blood no longer takes place, otherwise it would invariably produce death, there must consequently be an equilibrium between the quantity of chloroform absorbed, and that which is displaced and eliminated by the process of respiration. If, during this stage of insensibility from any cause whatever, the power of absorption of the blood for chloroform be suddenly increased, or its property of giving it out to the air inspired be diminished, then death will take place from an accumulation of the vapour in the blood. It is difficult to imagine that the power of blood of absorbing the substance under consideration should be suddenly increased; but there is a very simple cause impairing its elimination from the blood, viz., the administration of the chloroform vapour in too concentrated a condition. Just as an excess of carbonic acid in the air prevents or interferes with the elimination of that contained in the blood, so must an excess of chloroform in the air prevent or interfere with the exit of chloroform already existing in the blood; therefore, the blood goes on taking up chloroform, and giving out less than a quantity equal to that absorbed, at the same time the evil may be increased by a few deep inspirations taken unconsciously, although apparently with the view of ejecting the poison, and life is suddenly extinguished.

This view would perhaps partly account for the case of death reported by Dr. Dobbie; in addition to which I might observe, that the patient being a drunkard, we may assume that the action of his lungs was more or less impaired from their being continually engaged with the elimination of alcohol; the delicate membrane of the air-cells was, probably, thickened, which at first acted more or less as an obstacle to the admission of chloroform into the blood. A statement of the author referred to, appears to support the present assumption; he observes, "for two or three minutes he (the patient), did not come much under the influence of the drug (chloroform), inhaling it, however, readily enough." It was, therefore, apparently some time before the patient could be narcotised, as is the case, if I mistake not, with most drunkards. The exhibition of chloroform being continued, more of it found its way into the blood, while we may surmise that the elimination of the vapour already absorbed was checked from the thickened condition of the pulmonary membrane, which interfered materially with the action of the air inspired along with the chloroform; or in other words, the chloroform passed through the lungs into the blood, while the air was unable to do so with a sufficient degree of readiness to remove an equal quantity of the vapour out of the blood; from this circumstance there resulted an excessive accumulation of chloroform in the blood.

From the foregoing observations we may conclude:—

1. That chloroform must be administered cautiously, and its effects watched with particular attention, if, although the vapour be freely inhaled, the patient does not become insensible within the usual time.

2. That in every case where chloroform is administered, as soon as the state of insensibility is obtained, the vapour must be exhibited diluted as much as possible with pure air; and air free from the anæsthetic agent ought to be allowed frequently into the lungs to remove the excess of the vapour present in the blood.

3. That during the administration of chloroform great attention should be paid to the state of the respiration, which ought to guide the exhibition of the anesthetic agent still more than the condition of the pulse. If the inspirations become less deep and respiration appear failing, air free from chloroform ought to be immediately allowed into the lungs, not only because this state of the respiration is an indication of there being an overdose of chloroform in the blood, but also because the diminished respiration is in itself a cause of danger by preventing the blood from ridding itself of the chloroform it contains.

4. That when a patient has sunk under the effects of poisoning by chloroform the only means of restoring animation is by artificial respiration, adopting such method as is best calculated to introduce as much air as possible into the lungs in order to remove the poison from the blood, at the same time stimulating the action of the heart.

It is due to Messrs. Lallemand, Perrin, and Duroy to state that they have already called attention to the importance of looking closely to the respiration during the administration of chloroform; but these gentlemen have overlooked the fact that the presence of an excessive proportion of chloroform in the air inspired must act more or less as an obstacle to the elimination of the vapour which has already been absorbed—a circumstance which ought to be taken into consideration on every occasion where chloroform is exhibited.

4, George-street, Hanover-square.

Queen's University in Ireland.—At a meeting of the Senate, held on the 15th inst. the following gentlemen were appointed Examiners in the departments of Medicine, Surgery, and the collateral sciences:—Chemistry: Professor Blyth, M.D.; Anatomy and Physiology: Professor King, M.D.; Zoology and Botany: Professor Greene, A.B.; Medicine: Professor Ferguson, M.D.; Surgery: J. H. Wharton, F.R.C.S.I.; Materia Medica and Medical Jurisprudence: William Frazer, L.K. and Q.C.P.I.; Midwifery: Edward B. Sinclair, M.D., F.K., and Q.C.P.I.

University College, London.—At Sessions of Council on the 6th and 13th inst., shares in the College, with the title of Fellow, were conferred on the following former students, who had taken degrees with honours at the University of London:—Frederick James Browne, M.D., Henry Thompson, M.B., and Joseph Lister, M.B., Fellows in Medicine. Mr. John Framlyn Streatfield was appointed Assistant-Surgeon to the Eye Infirmary.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

Assistant-Physician to the Metropolitan Free Hospital.

GUY'S HOSPITAL.

CASE OF ADDISON'S DISEASE.

(Under the care of Dr. GULL.)

[Reported by Mr. FORMAN.]

Sarah S., aged 37, admitted on May 31, 1861. Two years before she noticed that her skin gradually assumed an orange tint, which had increased since. Concomitant with this her health declined, until she was unable to take food or exercise, and became quite prostrated. Up to this time her health had been good, and her family showed no hereditary disease. She was at first a patient under the care of Mr. Frederick Toulmin, of Hackney, who, recognising the case as one of Addison's disease, sent her to Guy's Hospital. On admission her skin was coloured like an Arab. The darkest parts are those round the nipples. Conjunctivæ pearly white. She was much wasted, and unable to leave her bed. Pulse 80, small, and scarcely perceptible. The circulation is so feeble that she has lost motion and sensation in her left arm by leaving it out of bed. The breath had a faint saccharine smell; bowels regularly opened; urine natural in quantity, contains no sugar nor albumen, pale straw colour. She was sick, and unable to take anything but brandy. She died on June 15.

Autopsy.—The following is Dr. Wilks' account of the autopsy:—Body in a tolerable condition as regards robustness and fat, the limbs being not at all wasted, and there being sub-tegumental fat on the abdomen. The colour of the whole body was dark, but not so intense as seen in many other cases. There were pigmental patches, but the discolouration was tolerably uniform, though more in some places than in others. Thus the face was the darkest, and presented the very charaeteristic appearance of the disease; the eyes being sunken, and the expression indicative of utter exhaustion, such as witnessed in peritonitis or cholera. The lips covered with spots of pigment, the axillæ were dark, and there was a dark line above the knees, where the garters had been tied. Brain healthy, rather pale and soft. The apices of the lungs indurated by chronic pneumonia. Heart very small and feeble. The left ventricular walls were very thin. Muscular fibre pale. The omentum, which was thin, and contained but little fat, was found covered with specks of pigment, of a black colour, also here and there a black speck on the peritoneum. The surfaces of the ovaries were particularly noticed as thus spotted. The stomach was healthy. The glands of the duodenum slightly enlarged. Mucous membrane, near the pylorus, covered with black points of pigment. The solitary glands were very prominent, also Peyer's patches much raised and ill-defined. The solitary glands in the cæcum in like manner were very distinct. The mesenteric glands and the liver were quite healthy. On removing the other abdominal viscera the supra-renal capsules were found to be converted into hard masses of disease, and adherent to adjacent parts by tough inflammatory tissue. Thus the left adhered to the pancreas, and the right to the upper part of the kidney, and under surface of the liver. These organs, however, could be dissected off, their structure being in no way implicated in the supra-renal bodies, or, rather, the diseased materials which took their place were not very large, in length about that of the organs themselves, but not so broad. On cutting them through they were found softening in the interior, the exterior being composed of yellow firm material, such as is observed in other cases; but the interior had softened into a cream-like matter, like pus, or, rather, like purulent mucus, the fluid being viscid.

ST. BARTHOLOMEW'S HOSPITAL.

NECROSIS OF THE UPPER JAW IN A LUCIFER-MATCH MAKER.

In this Journal for February 16, 1861, we gave the particulars of a case of necrosis of the lower jaw occurring in a lucifer-match maker. We now have to record a case in which the upper jaw was affected. In our number for June 8, 1861, page 610, under the head of "The Medical Congress" (at Zurich), is an interesting *resumé* of the chief points connected with lucifer-match makers' disease. In this country it is generally believed that the upper jaw is very rarely attacked, and in the article alluded to it is stated that of eleven cases detailed by Professor Billroth, in two only was the upper jaw affected. Mr. Erichsen, in his work on Surgery, writes, "Both jaws are *equally* liable to be affected; but commonly only one at a time is diseased. Thus, of 51 cases collected by Von Bibra, both jaws were only affected in 5 instances—the upper alone in 21 cases, the lower in 25."

Frederick S., aged 28, was admitted an out-patient under the care of Mr. Coote, a few weeks ago. He then had great swelling of the right cheek, and just below the eyelid was a sinus, leading to diseased bone. The whole of the upper jaw on this side was found to be more or less diseased. The bone on the other side was also, to some extent, affected. He could scarcely breath through the nostrils. He had been a lucifer-match maker for eighteen years; but only began to suffer from it three years ago. He had no other special symptoms further than those general constitutional ones due to the irritation and discharge of the local disease mentioned. The smell was fetid and disgusting.

He was subsequently admitted an in-patient, under the care of Mr. Wormald, who, on July 9 last, removed the whole of the upper jaw, with the exception of the part forming the floor of the orbit. By one long incision by the side of the nose and through the lip he was enabled to expose and remove the disease. The man has since progressed favourably.

ST. THOMAS'S HOSPITAL.

CASE OF SCORBUTUS—CLINICAL REMARKS.

(Under the care of Dr. RISDON BENNETT.)

A married woman, aged 55, in comfortable circumstances, residing in Bermondsey, was admitted into Elizabeth's ward, under the care of Dr. Bennett, on the 6th of April. She stated that her health had usually been good, that she had twice had fever, the last time, twenty years ago, that the eatamenia had ceased five years ago, that she had not then had any flooding, but that since that time her bowels had been irritable. For eighteen months or more she has had more or less diarrhœa and frequent "spasms" of the bowels, and has, in consequence been compelled to abstain from her ordinary diet, and especially from meat and potatoes, after which the dirrhœa was always worse. For the last eighteen months she has lived principally on bread and butter, eggs, and sometimes cheese. For some months she has been getting very weak, lost all appetite, and suffered much from feelings of fainting and swimming in the head, and pains in the limbs. She presented a sunken, depressed aspect, and the colour of the face was a dirty white, with slight tinge of yellow, the gums were very spongy and bleeding, the teeth loose, the breath very offensive, the tongue pale, flabby, coated with a loose, dirty fur; skin cool; pulse 84, feeble; heart's action feeble, occasionally irregular, free from bruit, respiration natural, except on making the least exertion, when it became panting. Extensive ecchymoses occupied the legs and thighs, especially the right, and in the ham and about the ankle there was considerable swelling and hardness from extensive effusion into the soft tissues. Numerous but less extensive subcutaneous livid patches occupied the arms. Some of the glands in the groins were enlarged, and the ankles were slightly œdematous. The bowels were loose and the motions dark, loose, and offensive. The urine could not be seen. The right hypochondrium was tumid and tender, and the edge of the liver could be felt below the ribs. There was no evidence of enlargement of the spleen. Her chief complaint was of extreme exhaustion and of swimming of the head on attempting to raise the head from the

pillow. She was ordered a large mustard cataplasm to the hypochondrium, and a rhubarb and calomel aperient: was placed on milk diet, with strong beef-tea, ℥iv. of wine and lemon-juice for drink. Two days after she was ordered a dose of calomel and opium at bed-time, and twenty minims of tinct. ferri sesquic. and the same of dilute hydrochloric acid in infusion of cloves three times a-day, continuing the same diet, with the lemon-juice.

April 10.—The bowels were much quieter, and the tongue cleaner. She expressed herself as feeling better, but the pulse was 92, and very feeble, though the action of the heart was more steady. There was both more ecchymosis and more swelling of the right leg and thigh, and patches of ecchymosis occupied the joints of several of the fingers. There was less tenderness of the liver, though it was still somewhat enlarged. The secretion of urine was free, natural in appearance, acid, and free from albumen. Several of the teeth were so loose and troublesome that they were removed. The gums were very swollen and spongy, but there was not much bleeding from them. To continue the steel mixture and same diet, and take two pills containing grs. viij. pulv. ipecac. co. and gr. j. hyd. chloridi every night.

22nd.—The improvement in her aspect and general condition was very marked. The patches of ecchymosis were much less livid, but there was a good deal of swelling and hardness of the posterior parts of the legs and thighs, and some œdema of the ankles. The gums were less swollen and tender, the pulse decidedly stronger, and the heart's action more forcible. She could raise herself in bed without feeling faint; the tongue was quite clean, but the bowels still loose—the motions, however, being no longer offensive. She was allowed fish, and ordered a rhubarb draught. Continue the medicines.

25th.—The bowels had become quite quiet, and she was allowed a chop.

29th.—She omitted the pills, and used camphorated liniment to rub the legs and thighs, which now presented comparatively little discoloration, but were stiff, and somewhat smaller, and of brawny hardness in the popliteal spaces and over the gastrocnemii muscles.

May 2.—The bowels have again become loose; in other respects improving. To have pulv. Doveri, gr. v. o. n.

6th.—Bowels again quiet; tongue clean; gums and aspect of countenance comparatively healthy. No tenderness or apparent enlargement of the liver; appetite good; pulse greatly improved.

9th.—Bowels again relaxed. She now omitted for the first time the chalybeate mixture, and was ordered, instead, a mixture containing dilute nitro-muriatic acid, liq. taraxaci, and infus. cinchonæ.

13th.—Has continued manifestly to improve, but the bowels are again relaxed, and she was ordered ♏v. tinct. opii with each dose of the mixture.

20th.—Bowels have been quiet for some days, and the motions are natural. Her countenance has gained much of the character of health. She is cheerful, and free from giddiness or faintness; but there is a good deal of brawny hardness of the legs, and some slight pitting on pressure about the right ankle. Urine healthy. To omit the Dover's powder at night. Two or three days afterwards she also omitted the mixture and took no medicine. On the 30th, her bowels having remained quiet for a week, and expressing herself as well, and anxious to leave, she was discharged. The change in her condition, as compared with that when she was admitted, was very striking. She had a healthy, almost ruddy countenance, had gained much flesh, her spirits were cheerful, the appetite good, and though walking with some little difficulty, owing to the remaining stiffness and hardness of the integuments of the lower extremities, she had apparently regained her muscular power completely. She was advised to continue to take a little lemon-juice for some months after leaving the Hospital.

Dr. Bennett remarked on the comparative infrequency of sporadic cases of scurvy in the wards of our Hospitals, and the inference thence deducible that this disease was not produced by the common causes of disease among the poor. If scurvy were produced by ordinary errors of diet, and the common forms of deprivation to which the poor are constantly exposed, it would undoubtedly be more frequent than it is. In the case detailed there was reason to believe that the first step in the development of the disease was hepatic derangement inducing disordered bowels. The circumstances of this woman were superior to those of most Hospital patients, and she had, at all events, the means of obtaining requisite nourishment. Perpetually recurring obstinate diarrhœa appears, however, to have led her to keep to a diet deficient in some elements necessary to healthy sanguification, which, together with the exhausting effects of long continued discharges from the alimentary canal, so interfered with proper assimilation and nutrition, as to produce the peculiar dyscracy in which scurvy consists. This view of the origin of the disease, in the present instance, confirmed, as it appeared to be, by the actual condition of the liver at the time of admission, led Dr. Bennett to the employment of small alterative doses of mercury, and careful attention to the state of the bowels, excluding from the more usual antiscorbutic remedies, potatoes and vegetables, which were withheld till the bowels became quiet. But the lemon-juice was administered throughout, and the chalybeate mixture for one month. Dr. Bennett stated that the last well-marked case of scurvy that had come before him in the Hospital occurred in a woman also in comfortable circumstances; but who, from fear of cholera and in obedience to certain authoritative public directions for the prevention of that disease, had carefully abstained for a length of time from potatoes and all vegetables. This woman when admitted presented a remarkable example of the peculiar characteristic condition of the gums, which hung in large festoons over the teeth, and bled freely even by the motions of the lips. She speedily recovered under ordinary antiscorbutic treatment.

NORFOLK AND NORWICH HOSPITAL.

EXCISION OF KNEE-JOINT—REPORT OF THE STATE OF THE LIMB FOUR YEARS AFTERWARDS.

(Under the care of Mr. FRITH.)

[Reported by Mr. CHARLES WILLIAMS, House-Surgeon.]

William T., aged 13, was admitted under Mr. Frith's care, May 30, 1857, suffering from disease of the left knee. Six months before admission, while getting through a hedge, he punctured the inner side of the knee with a thorn. Inflammation ensued, and although leeches, blisters, lotions, etc., were assiduously applied, they failed to prevent destruction of the joint.

On admission there was considerable enlargement of the whole knee, which was immoveable, bent to a right angle, very painful, especially at night, and the head of the tibia was displaced backwards. A long course of treatment was pursued, without effecting the least benefit to the joint; at last the patient's health began to suffer, and operative measures were imperatively called for. The case seemed to be one very favourable for resection, and that operation was accordingly performed on July 10, 1857, by means of a semicircular incision across the front of the joint. The cartilages were not found to be in an ulcerated condition, but were softened, yellow, and separated from the bone beneath. A very thin slice was removed from the condyles of the femur, and the same from the head of the tibia, both pieces placed with their cut surfaces to each other, measured but one inch and five-eighths. The patella was not removed, nor was the peroneo-tibial articulation interfered with. The limb, after being properly adjusted, was placed in a wooden-box, so contrived that in all dressings disturbance of the knee would be unnecessary.

The operation was not followed by any bad symptoms. Suppuration took place in the usual manner, and subsided as the healing of the wound progressed—the latter process was completed in ten weeks, and at this period there appeared to be tolerably firm union between the extremities of the bones. The patient was discharged cured on October 10, 1857. He was able to walk with but little lameness. The amount of shortening did not exceed 1⅞ inch.

On June 3, 1861, the boy visited the Hospital, and we had an opportunity of ascertaining the condition of the limb, the joint of which had been excised four years previously. The extremities of the femur and tibia were firmly consolidated by bony material; the head of the latter was drawn to some extent backwards and outwards, and the condyles of the former thrown forwards. This displacement had

occasioned an inconsiderable curvature outwards in the neighbourhood of the knee, which was likewise flexed at an angle of about 135 degrees. The limb was shorter than its fellow by 4½ inches, one of which must be allowed for the angle, the remainder may be taken as the exact measure of real shortening. The length of the tibia was 12 inches, that of the opposite one 14 inches. With respect to the utility of the limb, the boy stated that it was very serviceable to him. He could walk a considerable distance without suffering inconvenience. He wore a high-heeled shoe, and was in the habit of walking, not on his toes as is usually seen in cases of shortening, but by bringing the sole of the foot well to the ground. The boy was in excellent health; he had abandoned his former occupation of farm-servant for that of a shoemaker.

SYPHILITIC AFFECTIONS OF THE NERVOUS SYSTEM.

CASES OF EPILEPSY ASSOCIATED WITH SYPHILIS.

(Continued from page 652.)

In the tenth volume of the *Transactions* of the Pathological Society, Dr. Bristowe narrates the following case, which was brought forward "chiefly in reference to syphilitic disease of internal organs, a subject which has been several times brought under the notice of the Society by Dr. Wilks and other observers." In *Case* 1 of our series there were deposits in several internal organs, the liver, spleen, testes, etc., but none were noticed in the brain. Dr. Bristowe remarks in reference to his case, "The kind of deposit supposed to result from the syphilitic poison was recognised both in the liver and brain, and was associated with what were, doubtless, venereal buboes in both groins."

Case 9.—*Epileptoid Attacks—Hemiplegia on the Left Side—Impaired Vision, most on the Left Side—Fatuity—Death—Autopsy: Disease of the Bones and Dura Mater on the Left Side—Fibroid Deposits in the Brain and Liver—Plugging of the Left Internal Carotid Artery.*—G. H., aged 34. Some years before admission he was seized whilst at work with a fit, from which he speedily recovered. Eighteen months before admission he had a second fit, which lasted two hours. He was insensible, but did not bite his tongue. No impairment of speech. No paralysis followed, but he became subject to attacks of vertigo and headache. Eleven days before admission he had a third fit, which was followed by hemiplegia on the left side, with indistinctness of speech. He was somewhat fatuous, and this condition increased. His sight became impaired, the left the most so, and he ultimately died comatose.

Autopsy.—The dura mater was found thickened and roughened over the left cerebral hemisphere; the bone also in this position was rough, congested, and slightly softer than natural. The surface of the brain was firmly adherent to this part, over a surface of eight square inches, by fibroid tissue, in which, and in the adjoining brain substance, were two or three fibrinous masses. (In the liver were found similar deposits.) In the left corpus striatum was found a cyst (apoplectic), and the right (explanatory probably of the hemiplegia) was congested and much softened. The left internal carotid and its branches were plugged. Dr. Bristowe believed that this case was one of syphilis, although there was no life history of the patient's having suffered from that affection.

Dr. Wilks in his work on Pathological Anatomy writes, "As regards nerves, it has clearly been made out in many cases that tumours, or neuromata, have been due to syphilis. The arteries, too, are in all probability susceptible of the same influence, that is, that a deposit, atheromatous or of an analogous kind, forms within the coats, leading to various consequences, and thus, in some cases of aneurism and softening of the brain from diseased vessels, syphilis has been the probable cause."

In the Pathological Society's *Transactions*, (Vol. IX., page 270,) Dr. Wilks writes, "Hitherto the belief has been that tertiary symptoms have been confined to the larynx, bones, etc, and a few external parts; but of late attention has been directed to the consequences of a specific influence on the internal organs; and there can be little doubt that pulmonary affections, such as varieties of bronchitis and phthisis, are constantly met with in those who are the subjects of inveterate syphilis, and several authors have alluded to hemiplegia occurring in the same class of patients which they have attributed to nodes on the cranium, but as it (according to an improved pathology) cannot have such a cause, it is most probable that the symptoms have arisen from a fibrinous deposit in the central parts of the brain, or from a softening produced by disease of the blood-vessels."

Case 10.—*Epileptiform Convulsions chiefly affecting One Side—History of Syphilis—Syphilitic Lepra—Great Improvement under the use of the Iodide of Potassium.*—The history of the following case, which occurred in the practice of Dr. Ramskill at the National Hospital for the Epileptic and Paralysed, is supplied to us by Mr. Smith, House-Surgeon. Richard P., aged 44, a painter, was admitted under the care of Dr. Ramskill, on April 23, 1861, for hemiplegia on the right side, and epilepsy of two years' standing. His mother was paralysed, but the rest of his family, so far as he knew, had not suffered from any disease of the nervous system. He had led an unsteady life, and five years ago had syphilis. Up to the night of his attack he was quite well, but before going to bed, he fell down on his right side. He became insensible, was convulsed and remained unconscious for an hour. After the fit he considered himself well again. Since, he has had a fit about once a-month. He was always convulsed more on the right side than on the other. On this side too he had constant pain in the right temple. Scattered over his body were large patches of lepra, unmistakeably syphilitic in character. Dr. Ramskill prescribed iodide of potassium four grains, three times a-day. In April he complained that his hearing was affected. In June it was noted that the rash had nearly gone, and he has not had a fit for two months.

Case 11.—*Epilepsy and Failure of Mental Power—Amaurosis—Optic Nerve-Entrance White and Anæmic—History of Syphilis.*—Robert C., aged 38, admitted March 4, 1861, under the care of Dr. Brown-Séquard at the National Hospital for the Epileptic and Paralysed. This patient was first attacked by epilepsy in June, 1860. He has only had one fit since, but has suffered much from mental depression, and loss of mental power. These last symptoms began about three or four years ago, and have continued more or less up to the present time. The first epileptic fit occurred suddenly whilst he was writing at a desk. He became insensible, was convulsed, and bit his tongue. He says that the fit lasted half-an-hour, and that soon afterwards he felt as well as usual. In June of the same year his sight began rapidly to fail, and in a fortnight he was unable to see for any useful purpose. Mr. Hancock, he states, divided the ciliary muscle in each eye, but without any benefit. Two days after this operation he had a second fit of epilepsy. He was insensible and convulsed, and bit his tongue, but does not know whether the convulsions were worse on one side or not. He has had no fit since, but at Christmas, and again a few days ago, he had what he calls "shakings," evidently, by his description, abortive fits of epilepsy.

In September he was ill for about a month, with symptoms, according to his wife's description, somewhat like those of delirium tremens. He had delusions, was extremely restless, and for several weeks did not recognise his nearest friends. He had at that time a great deal of pain in the top of his head, but no fits and no paralysis. He complained during nearly the whole time of a very offensive smell in his nose. Possibly there may have been some meningeal irritation arising from disease of the bones of the nose, as it does so frequently from disease of the ear.

He had at one time some pain in the vertex, but now he complains only of heaviness in the head, referring it chiefly to the occipital region. There is no paralysis, nor was there any after either of the fits. The only symptom of this nature is a little perverted sensation in the right cheek, and loss of smell.

The eyes were carefully examined by the ophthalmoscope. Atropine was put in, and the pupil dilated well without any adhesions. The optic disc was extremely anæmic, and bluish-white in appearance. The retinal arteries appeared small. The choroid appeared congested; but there was nothing to suggest the idea of there having been any syphilitic disease in the fundus. With the left eye he could only just distinguish light; with the right eye he could not see to read or to pick out large letters.

The history of syphilis is as follows:—When eighteen years of age he had a chancre, for which he was salivated. He

had, he says, no secondary symptoms for ten years, but says that "he might have had another chancre" in that interval. The secondary symptom was sore-throat. He had subsequently a node on the shin, for which he was severely salivated. About ten years ago he had a watery discharge from the nose, and for the last year he has had a discharge from the nostrils of a different character, consisting of crusts of mucus, etc. The loss of smell is probably due to disease of the mucous membrane of the nose, and not to any organic alteration in the olfactory nerves. Dr. Brown-Séquard had no doubt that his symptoms were due to syphilis. He prescribed for him a mixture containing iodide of potassium in doses of twelve grains three times a-day, with three grains of sesquicarbonate of ammonia in decoction of cinchona.

The amaurosis, and the condition of the optic nerve on which it depended, as revealed by the ophthalmoscope, is a very interesting symptom. It might have been expected that in this case the blindness would have been due to syphilitic choroiditis. We shall, in a further report, give the particulars of two other cases in which amaurosis with this condition of the optic nerves occurred in connexion with marked syphilitic symptoms. Probably, however, in both it is due only indirectly to the syphilis, as this condition of the optic nerves is frequently found in cases of amaurosis in which there is no history or suspicion of syphilis. It is probably due to some excentric irritation causing reflex contraction of the blood-vessels of the optic nerve, and consequent loss of function.

J. H. J.

Medical Times and Gazette.

SATURDAY, JULY 20.

GOSSIP OR BUSINESS?

The differences among Doctors are proverbial, but it may be questioned whether in any other profession there is more real agreement. The theologians, taken as a whole, are certainly much more cantankerous and disunited; and although the "learned brethren" of the Bar seem to agree tolerably well, it is but a seeming. The spirit of controversy among them evaporates partly in the Courts, where they are professionally pitted against each other, partly at the Bar dinners, where envenomed wit and humour are not wanting. The honest Medicos put forth their worst side to the public in their ordinary business, when black Care rides with them in their broughams or gigs, and sad thoughts of rent and taxes rise up. It is only when they congregate in holiday fashion that the true geniality of the Doctor shines out. Then the care-worn countenance beams for a period—too brief for health—with something like sunshine; old student-chums meet after long separation, and compare notes biographical; pleasant reminiscences are talked over; and, above all, astonishingly curious or successful "cases" are related with all details.

Long before the "Provincial Medical and Surgical Association" was founded, such meetings were organised among the country Practitioners of a district, where Papers were read and discussed, and a dinner or supper ended the business with a thorough sense of enjoyment. To such a Society Jenner communicated his earliest researches in vaccination. The cultivation of this kind of intercourse was avowedly one of the objects of the original founders of the Association, while at the same time they attempted to include Medical politics, topography, and hygiene in their programme of work.

The Annual Meeting of the British Medical Association is to take place next week, and earnest men are asking what will be done? Is the meeting for gossip or business? The printed arrangements inform us of little more than gossip. On Tuesday, July 23, at the first General Meeting, the retiring President, we are assured, "will make a few remarks;" then the new President "will deliver an Address,"—full, doubtless, of genial gossip about Kent and Canterbury; the Report of the Council will next be presented, and "other business transacted;" what "other business" we are not informed. On Wednesday, July 24, there will be a Babel of chat over coffee, ham, and eggs, at a "Public Breakfast;" and thereafter another General Meeting will be held, at which an "Address in Medicine will be delivered." We know that if anybody can make an address interesting Dr. Markham can; but as the members will be able to read it at their leisure in "the Journal," a gossip in the green fields will prove to many more seductive. And so with the "Papers and Cases" to be read—the necessary condiments of a meeting of Doctors. "Divine" service at the cathedral, and dinnerings will next come on, and the day will end with a *Soirée* at the Deanery, where mirthful gossip will doubtless be fast and furious. On Thursday, the third General Meeting will muster to assist at the "delivery" of an "Address in Surgery;" and after that to hear more "Cases and Papers" read. Then a "Slaughter of the Innocents" will wind up the business part of the proceedings, the poor disconsolate parents being assured that their productions shall appear in "the Journal." Finally, in the evening, there will be a guinea dinner, the usual toasts, and the usual laudations and *jubilates;* and so will end the Twenty-ninth Meeting of the British Medical Association.

What strikes the reader of this programme is its entire silence as to all those important political and Medico-political questions the solution of which depends upon the combined action of Medical Practitioners, and which, if solved rightly, would add enormously to both the usefulness and influence of the Profession at large. There is, for example, the systematic administration of relief to the sick poor. This question, practically developed by legislation, should not only render the Poor-law Medical service available for the systematic advancement of Medical topography and public hygiene (a fundamental object of the Association which of late years has been wholly lost sight of), but supply an honourable position and an efficient practical school to the young Practitioner. Then there is the question of the better management of our great public charities in all our large towns—the misappropriation of their benefits by the rich or capable classes, and the monopoly of their advantages as schools of practical Medicine by the few. It is not easy to say what a stimulus to industry and self-culture the opening of them to the younger Physicians and Surgeons would be. Nor should the ever pressing question of Self-supporting Medical Charities be omitted. Next we have the full and competent representation of the Medical Profession (not of the Colleges) of the three kingdoms in both Houses of Parliament as another important question. For upon its right solution depends the solid advancement of the public health; the efficient organisation of the public Medical Services, whether for the Army, the Navy, the sick poor, or public hygiene; the management of the insane and idiotic; the more efficient development of Medical organisation, by a thorough reform of the Colleges; the unity of Medical titles and privileges, and therewith the cessation of a thousand miserable quarrels; the appropriation of the taxes now levied by the Council on those entering the Profession to the general scientific purposes of the Profession at large throughout the kingdom; and, finally, the better administration of the Medical Act, hitherto so costly and so gigantic a failure. Here is work for an Association of Medical Practitioners, boasting of its two thousand members, and with which, in part at least, it ought vigorously to grapple.

We do not pretend to say what the Council will report as to the work done or to be done for the thousands of annual income expended; but we may venture to guess that there

will be a loud *gaudeamus* as to the "cheap" Journal the Association maintains,—as if there were a terrible want of cheap journalism in Medical England; or as if a penny or twopence a week in the price of a Medical newspaper was worthy the concentrated efforts of so large and wealthy a body, to the exclusion of every other subject which could give dignity and weight before the public to its proceedings. If the Association were engaged in a systematic agitation of those large and important reforms we have referred to, it might materially assist this and other well-established Medical Journals, and be a valuable means of giving unity, vigour, and scope to the labours of the Press; but such reforms have no official place in Association Journalism. An organ so emasculate as to all great and earnest business may well excite the complaints of men like Dr. Barham, one of the oldest members of the Association, and President of the South-Western Branch. "It is little short of ridiculous," he observed in his official capacity, "that a body of full-grown Professional men should hire a writer to issue weekly articles upon practical subjects, as Reflex Paraplegia, Asphyxia, or Pemphigus!"

It remains to be seen whether the present Council is prepared to place the Association in that position which, as a medico-political body, it ought to occupy, and which its best friends earnestly desire that it should occupy. Honest criticisms are never welcome to the weak and self-opinionated, so that our remarks may not be valued by some leading spirits in the Council as they fairly deserve to be; but we trust the Association generally will now look to its proper objects, and endeavour to attain larger results than it has arrived at for the last few years. Otherwise, it requires no spirit of prophecy to foresee the rise of a younger and vigorous rival. For the spread of sounder and larger medico-political views among the Profession will inevitably, sooner or later, raise up an Association, the great object of which will be to secure for Medical Science and the Medical Profession as a whole, that position in the body politic to which they are entitled.

THE WEEK.

The origin of life by continuous development is plainly asserted and grandly maintained by Dr. Grant, in his recently published "Tabular View of the Primary Divisions of the Animal Kingdom." In his Lectures, published nearly thirty years ago, he says, "All forms of matter appear to have a capability and a tendency to become organised, as all organic forms tend to higher stages of development, and chemical analysis shows the highest as well as the lowest forms of organic beings to consist of a complicated aggregate of mineral gases and liquids and solids. These organised aggregates once formed from their elements, all possess alike the means of transmitting their forms by generation, which is effected by the separation of a portion of their substance when their own development is completed." Speaking of animals, in the work just published, he says, "The nuclei of their first formative cells, like all other products of animal growth and organisation, originate *de novo* from their fluid organic elements, either in the infusion of organic matter in the exterior waters of the globe, or in the interior of bodies already organised; never by evolution from indefinite ancestry."

Doctor Sangrado was not altogether a creature of the imagination. About the years 1708 and 1710, as we learn from an admirable article in the new number of the *British and Foreign Quarterly*, "there circulated throughout Southern Spain, a pamphlet recommending water as a universal remedy, only requiring to be drunk the more largely the more pressing the malady; and many minds were eagerly ready to accord their confidence to the new panacea." Le Sage alludes to the prevalent heresy in 1715; and in 1717, Navarrete, an eminent Professor at Granada, attacked it, and gave the following satirical description of it:—

"As soon as the Doctor is called and resolves to adopt this treatment, he commences by giving the patient two or more pints of cold water before breakfast, the same at mid-day, and a like quantity in the evening, with freedom to add to this at pleasure during the day; or the rule is made more rigid for several days, during which the patient, under deprivation of food, is to drink every two or three hours, with the warning that what he takes before going to sleep is the most beneficial. In the subsequent days, the quantity of water is gradually augmented. If the patient lose appetite, he is told that it is a favourable sign; they go on diminishing the quantity of food, or allow only broth, giving abundance of cold water before and after it. Should diarrhœa occur, although a total relaxation be manifest, they still say that it is good; and even when the stomach shows signs of complete debility and enervation, it is good to drink on. If great weakness of pulse, or nervous depression, sleeplessness, and atony of the natural, animal, and vital actions supervene, they say that it is good, and the patient must drink more. If the liver, or the spleen, or the abdomen become tumid, or the limbs with the whole body begin to swell, they say that it is good, and all that is wanting to dispel the tumefaction is to drink on. If cold sweats and faintness present themselves, it is still good, and he must drink; and lastly, if he die (as has happened to many), they say it is because he did not drink more, or because, finding himself in the last extremity, he did not choose to drink during the agonies of death."

"This picture," says the Editor, "might be paralleled at this day."

Our readers who are interested in the present state of the measure for effecting the amalgamation of the Medical Societies, will be glad to hear that the Special General Meeting of the Royal Medical and Chirurgical Society, which was adjourned from April 5 last, will re-assemble on the 23rd inst. at 8 p.m., and that, at the conclusion of the business, the meeting will be made special for the purpose of taking into consideration a further proposition from the Council. The Council met on April 9, when it was resolved:

"That a letter be addressed to the Presidents of the Pathological, the Epidemiological, and the Obstetrical Societies, stating that the Royal Medical and Chirurgical Society at a Special General Meeting had passed the following resolution, viz.:—'That it is the opinion of this meeting that it would tend to the advancement of Medical Science, were the Royal Medical and Chirurgical, the Pathological, the Epidemiological, and the Obstetrical Societies united under one head, and these different branches of Medical Science carried out in corresponding sections of one Society.' And that, in communicating this resolution to the —— Society, the Council wish it to be known that no definite scheme has been determined on by the Royal Medical and Chirurgical Society: and, further, that they will be glad to receive any suggestions on the subject from the Council of the —— Society."

A letter having been sent to the President of each of the designated Societies, the following reply was received from the "Obstetrical":—

"That this Council is not prepared to come to any decision in favour of the proposed amalgamation of the Societies."

The "Epidemiological" resolved,—

I.—"That it is desirable, for the promotion of the objects for which this Society was instituted, that the proposed amalgamation of the Epidemiological with the Royal Medical and Chirurgical and other Societies, should take place.

II.—"That having considered the scheme proposed by the United Committee, this Society, without binding itself to all its details, is disposed to receive favourably the proposition to assist in obtaining a supplemental Charter."

The resolution of the "Pathological" was as follows:—

"That the Council of the Pathological Society having

taken into consideration the letter of the Secretary of the Medical and Chirurgical Society of April 11 last, resolve that they have no suggestion to offer in reference to the proposed union of the Societies, but will be prepared to consider any propositions from the Medical and Chirurgical Society for effecting that object, provided the usefulness of this Society be not interfered with."

The following is the proposition which remains for the consideration of the adjourned meeting of the Medico-Chirurgical Society:—

II.—"That the Council be empowered to apply for a supplemental Charter, for the purpose of carrying out a scheme in conformity with the foregoing resolution."

The President and Secretaries inform the Fellows that,—

"Upon full consideration, the Council are of opinion that the amalgamation of the Societies cannot be satisfactorily effected without an alteration of the Charter of this Society, which alteration, under present circumstances, the Council are not prepared to recommend. The Council submit the following proposition for consideration at the Special General Meeting, which is to take place on the 23rd inst., immediately after the business of the adjourned meeting has been concluded:—'That the Council from time to time appoint Committees from among the Fellows of the Society for the purpose of investigating questions of Scientific Medical interest, that such investigations be carried on at the expense of the Society, and that the reports of such Committees be published in the Proceedings or Transactions, as the Council may think fit.'

Why a day should have been fixed upon when many of the Fellows will be at Canterbury we cannot pretend to determine.

Mr. Philip Crampton Smyly was elected, last Saturday, one of the Surgeons to the Meath Hospital and County Dublin Infirmary, in the room of the late Dr. Porter. Mr. Smyly is a little more than two years older than his uncle, the late Sir Philip Crampton, was when he received the same honourable appointment, and to judge from his antecedents it may reasonably be hoped that he will turn the vast advantages thus early placed at his command to as good account as his distinguished relative did. Mr. Smyly, on taking his degree in the University of Dublin, obtained a Moderatorship in Physical Science, he competed successfully for the Gold Medal of the Dublin Pathological Society, and as a pupil he took the first Medical prize in the Hospital to which he has just been appointed. An anonymous newspaper agitation was got up against Mr. Smyly on account of his youth, and we are glad to be able to publish the following extract from a generous letter in reply from Mr. Maurice Collis:—

"It is so transparent a fallacy to suppose that age means ability, that I need scarcely discuss it. Experience has shown that the younger a man can obtain an Hospital appointment, the better Surgeon will he be; his hand can be formed to operate well, and his mind is free from the fetters of routine. Whoever is elected has to learn his work. No previous experience in any other capacity, however valuable it may be as mental training, can impart the manual dexterity which practice alone can give. Slowly and patiently must the new Surgeon advance, and with the utmost caution; fortunate is the man who comes to this part of his career with the modest humility of youth. The young man whose name has been so freely used (and abused) in your columns is a Moderator in Physical Science in Trinity College, and a Gold Medallist of the Pathological Society. He has spent seven years in the best Medical Schools in this country and abroad. He has already given proof of operative ability in some of the most delicate branches of Surgery, and he has gained the unanimous good-will of his former teachers and associates. It may be that others can show superior claims; if so, let them by all means do so. The man who gives me evidence of his power to become the best Surgeon shall have my vote. The election is vested in the Medical Board, as some compensation for laborious, and often dangerous services. As far as the public is concerned, these services are wholly gratuitous. They are rendered to the public without fee or direct reward. The indirect benefits which flow to us from them depend upon ourselves and our exertions. But I have no wish to deny that we are morally bound to exercise our dear-bought privilege in such a way as that the public shall derive the utmost benefit, and that the man whom we select shall have given us evidence that he is capable of becoming a first-rate Surgeon."

We have great pleasure in congratulating the authorities of King's College on their good fortune in securing the services of two such Surgeons as Mr. Henry Smith and Mr. Price as Assistant-Surgeons to their Hospital. Both gentlemen have proved by their doings and writings that they are well able to maintain and extend the reputation of any Medical Charity or Surgical School. The increase in the staff is also a cheering sign of progress towards the necessary increase of our Hospital staffs. Mr. Luke has followed the example set by Messrs. Cæsar Hawkins, Cutler, and Stanley, and has retired from his honourable position of Senior Surgeon to the London Hospital. This will lead to at least one vacancy in the list of Assistant-Surgeons.

We find by the returns of the Irish Census that the population of that part of the United Kingdom is still undergoing a steady and continuous decrease. In 1834 it amounted to 7,954,760; in 1841, 8,175,124; in 1851, 6,552,385; and in 1861, 5,764,543. The decrease is attributed by the Commissioners to emigration, for it seems that 1,174,179 persons left Ireland during the last ten years, not to return. But as there is yet no registration of births and deaths, our knowledge of the movement of the population, and of the causes which affect its vitality, is very limited.

"Dr." David Griffiths Jones has been remanded on the charge of forging the will of a Mrs. Bellis. Three clerks of the Union Bank deposed that the signature did not resemble the ordinary writing of the deceased. The following evidence was given by Dr. Murphy:—

"I was called to 43, Woburn-place, on the night of the 13th, or rather about one o'clock in the morning of the 14th of February last, to see Mrs. Bellis. I was called to see a sick lady, but I did not know her name at the time. She appeared very weak, and I told her so; and not being able to speak she merely bowed her head assentingly. She did not speak at all in my presence, and I heard no mention made of a will while I was there. I recommended claret and beef tea. She showed no symptoms of immediate death. I called on the following day—that is, about two o'clock on the 14th—to enquire for her, and was informed she was dead. Cross-examined.—When I recommended claret, a lady who was near the patient's bed said, 'She prefers port;' but I did not hear the patient speak. She might have spoken to others without my hearing her, as I was standing near the fire-place."

The origin of disease and mode of prevention are constantly being investigated by our Medical Officers of Health, as the following extract from Dr. Thomson's last Monthly Report for Marylebone will show. We should be glad to see some general and comprehensive plan for ventilating sewers adopted, as it cannot do very much good to poison one part of a street to save another:—

"An outbreak of fever has occurred in Burne-street. The disease first appeared in a young man who worked at some distance. The remainder of the family (six) to which he belonged living in one room, were successively affected with the disease, and two died, although one had been removed to the Fever Hospital. Two other families were attacked, but although strongly urged to go to the Fever Hospital, none

would consent. The deaths have been four in three families. Great complaints have been made of a ventilating shaft in front of the house in which these deaths occurred. This shaft is placed at the north end of the sewer in Burne-street, and I have suggested that the gases which emanate from it, instead of passing vertically, should be conveyed by means of a drain pipe to a higher part of the street, opposite to a blank wall, as ventilation is absolutely required in such sewers, otherwise the noxious gases are forced into the houses, in spite of traps and other appliances. Mr. Scace has undertaken to carry this improvement out at once, the case being one of great urgency." Dr. Thomson adds, "I beg to direct the attention of the Vestry to the nuisance of accumulated manure. I estimate the number of dung-heaps at nearly 2000 in the parish, and I consider that, in summer particularly, manure ought to be removed daily. But owners and occupiers of stables state it to be impossible to comply with such a suggestion under present arrangements. If the Vestry had the power of contracting for its removal, as in the case of dust, much annoyance to the inhabitants, and even injury to health, might be avoided. I trust they will take this matter into serious consideration."

Every one must see that a new epoch is about to arise in the administration of the affairs of the Royal College of Surgeons. It is true that much regret has been expressed that this first manifestation of vitality on the part of the Fellows should have led to the exclusion of a member of the Council possessing the abilities and standing of Mr. Bishop; but it is no less certain that he and his friends would have felt the exclusion with far less poignancy had not the Fellows so long neglected their duties, and by their inconsiderate apathy established the re-election of retiring members as a matter of course. Precisely the reverse of this ought to have been the rule. Every Member of Council who had served his five years ought to have retired as a matter of course, making way for others to have an opportunity of showing what they were capable of. If, however, a member, during his five years of office, prove himself of marked capacity as a legislator, or as a valuable champion of the general Professional interests, let him, by all means, be re-elected; thus converting into a valued exception what has hitherto been an unmeaning and mischievous rule. For this to work well, however, the electors must know something of what passes in the Council-room of the College; and if the susceptibilities of the Council prevent them discussing before an enlightened public the topics which come before them, at least let them follow the example of the General Council, and furnish, or allow to be furnished, reports of their proceedings. Surely this would be a more dignified procedure than the present plan of fishing for information by all kinds of indirect and unauthentic procedures. The General Council of Medical Education has set a good example in this matter, which must sooner or later be followed by the College; for, now that the Fellows have determined that re-election as a matter of course shall cease, they must be supplied with the material for judging how their representatives have performed the duties they undertook to fulfil.

THE following General Order from the Horse Guards has been promulgated to the officers and troops at various garrisons: "Much inconvenience having arisen from Medical officers of districts and regiments making reports to the heads of their Departments, without placing the military officers in immediate command in possession of these reports, his Royal Highness the General Commanding-in-Chief, with the concurrence of the Secretary of State for War, is pleased to direct that whenever Medical officers conceive themselves called on to make reports upon, or to offer suggestions concerning matters affecting the health of the troops, and sanitary condition of the locality in which they are stationed, to the head of the Medical Department, they shall furnish duplicates to the officer in immediate command.—James York Scarlett, Adjutant-General."

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Royal College of Physicians, London.

MINUTES OF THE GENERAL COMMITTEE ON EDUCATION.
SATURDAY, JULY 6, 1861.

The Council met as a General Committee on Education at Twelve o'clock.

Mr. GREEN, *President*, in the Chair.

The consideration of the Resolutions of the Report of the General Committee on Education, 1860, was resumed.

It was agreed, that in the second resolution the word "modifications" be substituted for "additions."

Resolution 5 was adopted, viz.:—"That without professing to lay down any complete scheme of General Education for persons intending to become members of the Medical Profession, the Committee recommend that the scheme of Examination in Arts of the Licensing Bodies be, as nearly as practicable, similar to that of any one of the National Educational Bodies above specified."

Resolution 6 was adopted, viz.:—"That after October 1, 1861, all Medical Students be required to be Registered."

Resolution 7 was adopted, viz.—"That the lists of Students Registered be closed within fifteen days after the commencement of each Session or Term."

Resolution 8 was adopted, viz.—"That no Student beginning Professional study after September, 1861, be Registered, who has not passed an Arts Examination, in conformity with Resolutions 2 or 4."

Resolution 9 was adopted, viz.—"That the several Bodies in schedule (A) of the Medical Act, either jointly or severally, open a Register for Students commencing their studies in Medicine, in the form annexed."

The schedule annexed, for the Register of Medical Students, was adopted, with the substitution of "Place of Study" for "Place of Registration;" and with the following heading for the last column:—"What Examination in Arts, and its date."

SCHEDULE.

REGISTER OF MEDICAL STUDENTS.

No.	Name.	Date of Birth.	Place of Birth.	Present Residence.	Date of Registration.	Place of Study.	Registering Body.	What Examination in Arts, and its Date.
1	A. B	..	..	London.	..	University College, London.	University of London.	Matriculation Exam. of the University of London; May, 1861.
2	C. D.	..	..	Birmingham.	..	Birmingham General Hospital.	Royal College of Surgeons England.	Oxford Middle Class Exam.; August, 1861.

Resolution 10 was adopted, viz.—"That the said Register be opened on the first day of each Session or Term, and remain open for fifteen days; and that within seven days after its close the officer in charge transmit a duly authenticated copy thereof to the Registrar of the Branch Council of that Division of the United Kingdom to which the Body or Bodies belong."

Resolution 11 was adopted, viz.—"That the Registrar of the Branch Council lay the List before the Branch Council, in order that the Branch Council may take whatever steps may seem necessary to secure its accuracy; and that it thereafter be transmitted, with any remarks by the Branch Council thereon, to the Executive Committee."

Resolution 12 was not adopted, viz.—"That the Executive Committee arrange these Returns, and publish annually an Alphabetical List of the names contained in them."

Resolution 13 was adopted, viz.—"That the Licensing Bodies have power to admit exceptions as to the time of Registration, if satisfactory to them, and transmit Lists of such exceptions to the Branch Council of the part of the United Kingdom in which such exceptions have been granted, with the grounds stated."

The 14th Resolution having been read, viz.—"That the

various Educational and Licensing Bodies be requested to transmit to the Registrar of the General Council, Returns, embodying any alterations which they may from time to time introduce into their courses of General Study and Examinations, which qualify for the Registration of Medical Students."

1. Moved by Mr. TEALE, and seconded by Dr. EMBLETON—That the following addition be made to Resolution 14 of the Education Report of 1860. And that a copy of such Returns be sent by the Registrar, as soon as convenient, to each Member of the General Council.—Agreed to.

The 14th Resolution was adopted, with the foregoing addition.

2. Moved by Dr. CORRIGAN, and seconded by Mr. ARNOTT—That it be deputed to the Executive Committee to draw up, for the information of the Council at their next Meeting, a list of the Subjects which, in their opinion, should be included in the Examination of Candidates in General Education, to enable the Council to lay down a minimum uniform standard, by which to determine what Certificates of Proficiency in General Education shall be in future received.—Negatived.

II.—PROFESSIONAL EDUCATION.

Resolution 15 was adopted viz.: — "That the age of twenty-one be the earliest age at which any Professional Licence shall be obtained."

Resolution 16 was adopted, viz.:—"That four years of Professional Study be required after the Examination in General Education."

III.—PROFESSIONAL EXAMINATIONS.

Resolution 17 was adopted, viz.:—"That the Professional Examinations be divided into at least two distinct parts; that the first be not undergone until after the termination of two years of study; and the final examination not until after the termination of four years of study."

Resolution 18 was adopted viz.:—"That the first Professional Examination be conducted partly in writing and partly *vivâ voce*; and that such parts as admit of it be made as practical and demonstrative as possible."

Resolution 19 was adopted, viz.:—"That the second Examination be conducted partly in writing, partly *vivâ voce*, and practically as far as may be convenient and attainable."

3. Moved by Mr. WATT, and seconded by Dr. ANDREW WOOD—That the Professional Examinations be publicly conducted.

Amendment moved by Dr. THOMSON, and seconded by Dr. A. SMITH—That the consideration of this subject be postponed.—Carried.

Resolution 20 was adopted, viz.:—"That the Professional Examinations be held by the several Licensing Bodies (except in special cases) at stated periods, to be publicly notified."

Resolution 21, viz.:—"That Returns from the Licensing Bodies under Schedule (A) be made annually, on the 1st of January, to the General Medical Council, stating the number and names of the Candidates who have passed their respective final Examinations, and the number of those who have been rejected," was adopted with the alteration, that "The Returns be made to the Registrar of the General Medical Council."

4. Moved by Dr. ANDREW WOOD, and seconded by Mr. ARNOTT—That a Sub-Committee, consisting of Dr. Stokes, *Chairman*; Mr. Teale, Dr. Embleton, Dr. Andrew Wood, be appointed, for the purpose of bringing up the Report on Education, as finally amended during this Session.—Agreed to.

MINUTES OF MEETING, SATURDAY, JULY 6, 1861.

Mr. GREEN, *President*, took the Chair, at Two o'clock p.m.

The Minutes of the last meeting were read and confirmed.

1. Moved by Dr. ALEXANDER WOOD, and seconded by Mr. HARGRAVE—That the case of David Griffiths Jones, the plaintiff in the suit of Jones *versus* the Queen's Proctor, to which the attention of the Solicitors of the Council was called by the vote of yesterday, be referred to the English Branch Council, to be investigated by them according to the form of proceeding adopted by the General Council.—Agreed to.

Read, a letter from the Secretary of the National Medical Registration Association, relative to the case of David Griffiths Jones.

2. Moved by Dr. ALEXANDER WOOD, Seconded by Dr. STORRAR—That the Registrar be instructed to inform the Secretary of the National Registration Association that the Council have already taken up the case.—Agreed to.

The Report of the Medical Acts Amendment Committee was considered.

3. Moved by Dr. STOKES, and seconded by Dr. APJOHN—That the Report of the Medical Acts Amendment Committee be received.—Agreed to.

4. Moved by Dr. CORRIGAN, and seconded by Dr. STORRAR—That the Report of the Medical Acts Amendment Committee be referred to the Executive Committee, with instructions to correspond with the various Branch Councils, and endeavour, before next meeting of Council, to settle those principles on which alterations of the Medical Act should be framed.

Amendment moved by Dr. ANDREW WOOD, and seconded by Mr. HARGRAVE—That the Report of the Medical Acts Amendment Committee be referred to the Executive Committee, with instructions to consult Parliamentary solicitors, with the view of preparing a Draft Bill, to be subsequently sent to the Branch Councils for their consideration.—Negatived.

The Report of the Committee on the Publication of the Register was considered.

5. Moved by Dr. ALEXANDER WOOD, seconded by Dr. STORRAR—That the Report of the Committee on the Publication of the Register be referred to the Executive Committee, with power to take any steps that may appear to them expedient to reduce the expense of publication.—Agreed to.

6. Moved by Dr. ANDREW WOOD, and seconded by Dr. BURROWS—That Dr. Sharpey be appointed Treasurer to the General Council in room of Mr. Green, resigned.—Agreed to.

7. Moved by Dr. ANDREW WOOD, seconded by Mr. HARGRAVE—That the Executive Committee consist of the President, Dr. Burrows, Dr. Sharpey, Dr. Acland, Mr. Arnott—Agreed to.

The Report of the Standing Orders Committee was considered.

8. Moved by Mr. TEALE, and seconded by Mr. LAWRENCE—That the Report of the Committee for Revising the Standing Orders be adopted, and that it be printed in a separate form, and that two copies thereof be sent to each member of Council.—Agreed to.

Dr. STOKES, on the part of the Sub-Committee, brought up the Report of the General Committee on Education.

REPORT OF THE GENERAL COMMITTEE ON EDUCATION.

The Committee on Education, composed of the whole Council, have agreed to the following Resolutions, which they now lay before the Council, as Recommendations to the Licensing Bodies, in Schedule (A) of the Medical Act, to be printed in the Minutes, and also in a separate form.

Recommendations of the General Medical Council, in reference to General and Professional Education:—

I.—GENERAL EDUCATION AND EXAMINATION.

The Medical Council are of opinion that it is desirable—

1. That all Students pass an Examination in General Education before they commence their Professional Studies.—Negatived.

2. That the time of commencing Professional Studies shall be understood to be the time of commencing Studies at a Medical School, and that no Qualifying Body be held to have complied with the recommendation of the Council which shall allow the Examination in General Education to be passed after the commencement of Professional Study.

3. That, as far as may be practicable, testimonials of proficiency granted by the National Educational Bodies according to the following List, be accepted, with such modifications as the Medical Council may from time to time think proper to make.

A Degree in Arts of any University of the United Kingdom, or of the Colonies, or of such other Universities as may be specially recognized from time to time by the Medical Council.

Oxford Responsions or Moderations.

Cambridge Previous Examinations.

Matriculation Examination of the University of London.

Oxford Middle Class Examinations, Senior and Junior (a).

Cambridge Middle Class Examinations, Senior and Junior (a).

Durham Middle Class Examinations, Senior and Junior (a).

(a) After January 1, 1863, all Junior Middle Class Examinations will be excluded from the List.

Durham Examinations for Students in Arts in their second and first years.

Durham Registration Examination for Medical Students.

Dublin University Entrance Examination.

Queen's University, Ireland, two years' Arts' course for the Diploma of Licentiate in Arts.

Preliminary Examinations at the end of A.B. course,

Middle Class Examinations.

Matriculation Examinations.

First Class Certificate of the College of Preceptors.

4. That the Examination in General Education be eventually left entirely to the Examining Boards of the National Educational Bodies recognised by the Medical Council.

5. That no Certificate of Proficiency in General Education, which does not affirm the Proficiency of the Candidate in Latin, be deemed a sufficient proof of Preliminary Education previous to the commencement of Professional Studies.

6. That Students who cannot produce any of the Testimonials referred to in the Third Resolution, be required to pass an Examination in Arts, established by any of the Bodies named in Schedule (A) of the Medical Act, and approved by the General Council, provided that such Examination be in every case conducted by a Special Board of Examiners in Art.

7. That without professing to lay down any complete scheme of General Education for persons intending to become members of the Medical Profession, the Committee recommend that the scheme of Examination in Arts of the Licensing Bodies be as nearly as practicable similar to that of any one of the National Educational Bodies above specified.

8. That after October 1, 1861, all Medical Students be required to be Registered.

9. That the Lists of Students Registered be closed within fifteen days after the commencement of each Session or Term.

10. That no Student beginning Professional Study after September, 1861, be Registered, who has not passed an Arts Examination, in conformity with Resolutions 3 or 6.

11. That the several Bodies in Schedule (A) of the Medical Act, either jointly or severally, open a Register for Students commencing their Studies in Medicine, in the form annexed. (See p. 63.)

12. That, after January, 1863, all Junior Middle Class Examinations be excluded from the list.

13. That the said Register be opened on the first day of each Session or Term, and remain open for fifteen days; and that within seven days after its close, the officer in charge transmit a duly authenticated copy thereof to the Registrar of the Branch Council of that division of the United Kingdom to which the body or bodies belong.

14. That the Registrar of the Branch Council lay the copy of the said Register before the Branch Council, in order that the Branch Council may take whatever steps may seem necessary to secure its accuracy; and that it be thereafter transmitted, with any remarks by the Branch Council thereon, to the Executive Committee.

15. That the Licensing Bodies shall have power to admit exceptions as to the time of Registration, if satisfactory to them, and transmit lists of such exceptions to the Branch Council of the part of the United Kingdom in which such exceptions shall have been granted, with the grounds stated.

16. That the various Educational and Licensing Bodies be requested to transmit to the Registrar of the General Council, returns, embodying any alterations which they may from time to time introduce into their courses of general study and examinations, which qualify for the Registration of Medical Students; and that a copy of such returns be sent by the Registrar, as soon as convenient, to each member of the General Council.

II.—PROFESSIONAL EDUCATION.

17. That the age of twenty-one be the earliest age at which any Professional Licence shall be obtained.

18. That four years of Professional study be required, after the examination in General Education.

III.—PROFESSIONAL EXAMINATIONS.

19. That the Professional Examinations be divided into at least two distinct parts; that the first be not undergone until after the termination of two years of study; and the final Examination not until after the termination of four years of study.

20. That the first Professional Examination be conducted partly in writing and partly *vivâ voce*; and that such parts as admit of it be made as practical and demonstrative as possible.

21. That the second Examination be conducted partly in writing, partly *vivâ voce*, and practically, so far as may be convenient and attainable.

22. That the Professional Examinations be held by the several Licensing Bodies (except in special cases) at stated periods, to be publicly notified.

23. That returns from the Licensing Bodies under Schedule (A) be made annually, on the 1st of January, to the General Medical Council, stating the number and names of the Candidates who have passed their respective final Examinations, and the number of those who have been rejected.

24. That it be recommended to all the Examining Boards that they should require from every Candidate for Examination before them a statement, signed by himself, whether he has or has not been rejected within three months by any of the Examining Boards included in Schedule (A) of the Medical Act.

25. That it is not desirable that any University of the United Kingdom should confer any degree in Medicine or Surgery, whether that of Bachelor, Doctor, or Master, upon Candidates who have not graduated in Arts, or passed all the Examinations required for the Bachelorship in Arts, or the Examinations equivalent to those required for a Degree in Arts.

9. Moved by Dr. STOKES, and seconded by Dr. EMBLETON—That the Report of the General Committee on Education be adopted.—Agreed to.

10. Moved by Dr. STOKES, and seconded by Mr. TEALE—That copies of the Report on Education be transmitted by the Registrar to the various Bodies mentioned in Schedule (A), and also to the Commissioners of the Scottish Universities, and to each of the Scottish University Courts.—Agreed to.

11. Moved by Dr. ANDREW WOOD, and seconded by Mr. LAWRENCE—That the best thanks of this Council are eminently due, and are hereby offered, to the Royal College of Physicians of London, for their obliging and courteous accommodation during the present Session of the Medical Council.—Agreed to.

12. Moved by Dr. ANDREW WOOD, and seconded by Mr. LAWRENCE—That a gratuity of Ten Guineas be given to the servants of the Royal College of Physicians of London.—Agreed to.

Confirmed—JOSEPH HENRY GREEN.

ADJOURNED MEETING, SATURDAY, JULY 6, 1861.

MR. GREEN, *President*, took the Chair, at Five o'clock, p.m.

The Minutes of the last meeting were read and confirmed.

REVIEWS.

The Genealogy of Creation: Newly Translated from the Unpointed Hebrew Text of the Book of Genesis, showing the General Scientific Accuracy of the Cosmogony of Moses, and the Philosophy of Creation. By HENRY F. A. PRATT, M.D., Member of the Royal College of Physicians of London. 8vo. Pp. 406. London: 1861.

FEW persons will be disposed to deny the importance of a reverent estimation of the Bible, or to deny the stability which that Book confers on our most important institutions, such as property, marriage, and, in fact, everything which we most value. That there are discrepancies, real or apparent, between the earlier books of the Bible and the later teachings of science, is generally admitted, and many have been the attempts to reconcile them. Some difficulties appear on close examination not to belong to the text, but to a traditional gloss put upon it. Such a gloss was that which was dissipated by Professor Simpson when he showed that it was by no means impious, as was alleged by well-meaning persons, to relieve the pains of women in labour. Other difficulties arise from a want of knowledge of the exact literal meaning of the text; and disappear by the application of a more minute and searching criticism. An example of this is given by the common confusion between the word *Le hi* and *jaw-bone* in the history of Sampson. It is necessary, again, to know the precise limits to the authority of precepts given; to know whether they were meant for all time or not. For example, a command not to eat blood, nor animals killed by strangulation, appears to have been given to Noah after the Deluge; it

was repeated throughout the Mosaic Ritual, and affirmed by the Apostles at Jerusalem; it is observed to this day by Oriental Christians, but has been neglected in Western Christendom for 1400 years. So, too, all the restrictions on marriage in the New Testament are disregarded by Protestants, and the rule that an επισκόπος should be husband of one wife has shared the some fate. It is requisite to know also whether any given statement be simply historical, or parabolic, or poetical, before its precise force can be estimated.

On the other hand, Science may be challenged as to her interpretations of facts; it is hard on the defenders of Revelation to call on them to defend themselves one day from a theory that man arose from several first ancestors, and belongs to many species, and the next day from another which holds that species do not exist, and that man and all other animals sprang from one animated germ.

A member of our own Profession, whose work shows that we are entitled to call him a learned, laborious, and ingenious member, has come forward to show that Science and Revelation may be completely reconciled, and that there is not only nothing contrary to the teachings of modern science, but everything in accordance with them, in the account given of the creation in the Book of Genesis.

The Author's argument is this. The "ancient Hebrew tongue," as it exists in the "unpointed" text, is a completely dead and lost language. The Masoretic or "pointed" text is a mere version, posterior in date and inferior in authority to the Septuagint and Vulgate; nay, it is in many respects a conjectural version, or a commentary. The true sense is to be sought for by exploring the ancient or unpointed text. "The whole general sense of the Hebrew Scriptures, certainly of the more ancient portion of them, was lost; and thus the traditional readings which had gradually crept in were embodied in what are now considered or called the pointed or Mascoretic readings."

We do not feel competent to follow Dr. Pratt in the arguments by which he attempts to prove this point; but we may give a specimen of the results which he has obtained by discarding the received text, and endeavouring to elicit the meaning of the ancient or unpointed Hebrew. We may observe only in passing that this primitive language was so constructed, in Dr. Pratt's opinion, "as to admit of its embodying more than one sense in any given sentence," so that a mystical or prophetic might be superadded to a literal and historical statement.

Let us take the exordium of Genesis:—

"With deliberation God created the heavens and the earth; and the earth was crude and unorganized, and inert as to the crust of the heaving mass; and a mighty wind was rushing over the surface of the waters.

"And God said,—'Let there be volcanic action,' and there was volcanic action, and God saw the volcanic action that it was good; and God distinguished between the valcanic action and between the inertia; and God called the volcanic action the 'active condition,' and the inertia He called the 'passive condition.'

"And it was re-distributive, and it was developmental, the first formation."

Here is a specimen of the history of the Temptation:—

"Now the nachash was more wily than any beast of the field that God the Creator had made; and he said unto the woman, 'Did God really say, Ye shall not eat of any tree of the garden?' . . . 'Then the eyes of them both were opened, and they knew that they were naked, and they produced upon each other the dawn of mutual desire—thus they aroused their animal passions.'

"And God the Creator made hairy the skin unto Adam and unto his wife, like the beasts; thus they veiled their shame."

These specimens are startling enough; but if Dr. Pratt's system of criticism be a sound one, they are but trifles to the entire revolution which must take place in the received sense of the Bible. We confess that on a *primâ facie* view of things, the grand Homeric simplicity of the received text seems much more likely to be the true sense than the extremely subjective and compound style of Dr. Pratt. The words "re-distributive," "developmental," and "formative" scarcely belong to an early period of the human intellect. The notion that the Septuagint, quoted as it is in the New Testament, is a conjectural version, and yet superior to the common Hebrew text, will not be popular amongst divines.

Epileptic and other Convulsive Affections of the Nervous System; their Pathology and Treatment. By Charles Bland Radcliffe, M.D., F.R.C.P., Physician to, and Lecturer on Materia Medica and Therapeutics at, the Westminster Hospital. Third Edition (incorporating the Gulstonian Lecture for 1860). Pp. 312. London: 1861.

That there is a good deal to be said in favour of Dr. Radcliffe's peculiar views of muscular action and convulsion, and that the Profession is willing to hear all that he is ready to advance in their support, is sufficiently evidenced by his book on epilepsy and other convulsive affections having reached a third edition, no less than by his having been called to the lecture-table at Pall Mall to expound his opinions before the President and Members of the College. That Dr. Radcliffe has not succeeded in overturning notions so long cherished as those which he combats touching muscular action, is a matter which cannot surprise himself any more than less interested lookers-on. He, like all other reformers, must bide his time, trusting on the ultimate victory of truth, on which ever side it may lie.

On former occasions we have freely expressed our opinions upon Dr. Radcliffe's theory, and its application to the pathology and therapeutical management of epilepsy. We do not feel called upon to enter afresh upon the subject; it is one on which every physiologist will, by this time, have formed an opinion, either in favour or adversely.

A Visit to the Purton Spa: with a Short Account of the Extraordinary Properties, and Effects of its Sulphated and Bromo-iodated Spring. By Robert H. Bakewell, M.D. Pp. 22.

Purton is a pleasant Wiltshire village, on the Great Western Railway, about six miles from Swindon, and blessed with a spring whose water is said by Dr. Voëlcker to contain about 350 grains of saline matter per gallon, chiefly sulphates of soda, magnesia, and lime, with minute traces of iron, bromine, and iodine. It is said to be pleasant to the taste, gently aperient, diuretic, and alterative, and probably will suit some persons who cannot afford to migrate to Carlsbad or Kissingen.

Thesis on Tubercular Leprosy, or the Elephantiasis Græcorum: with some General Observations on that Disease as it prevails at the Cape of Good Hope. Submitted to the Medical Faculty of the Senatus Academicus of the University of Edinburgh. By Alexander Abercrombie, M.D. 8vo. Pp. 32. Edinburgh: 1861.

The title describes the contents of the pamphlet. The latter part of the thesis is said by the author to be compiled from information derived from his father, "who has been a Medical Practitioner in that part of the world for upwards of thirty years." From a return of the ages and sex of lepers in the General Infirmary at Robbin Island, furnished by Dr. Minto, it appears that of 54 patients, 37 were males, that there were 5 under 20 years of age, 13 between the ages of 20 and 30 years, 21 between 30 and 40 years of age, 7 between 40 and 50 years, and only 8 upwards of 50 years.

A Week at the Land's End. By J. T. Blight. 8vo. Pp. 233. London: 1861.

Geological, botanical, zoological, and archæological, this volume will prove, we have no doubt, a useful and interesting hand-book for visitors to this extreme point of our island. It is extensively illustrated with engravings by the author, not only of picturesque and interesting localities, but of the rarer plants and birds which are met with at the Land's End.

The Great Crime of 1860; being a Summary of the Facts Relating to the Murder Committed at Road; a Critical Review of its Social and Scientific Aspects; and an Authorised Account of the Family; with an Appendix Containing the Evidence Taken at the Various Inquiries. By J. W. Stapleton, Surgeon, Trowbridge, Wilts. Pp. 379. London: 1861.

"*The right of translation is reserved.*" This ends the title page. We suppose, therefore, that a large and lucrative sale is anticipated of this *rechauffé*. The British public love

horrors, whether in the form of a Newgate Calendar, a room at Madame Tussaud's, or a Road House murder. Well, although we cannot applaud the taste of the British public in this matter, we must admire the acuteness of the man who sees how it may be gratified, and how capital is to be made out of it. We only regret that in this instance our admiration is to be bestowed upon a member of our own Profession

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CASE IN WHICH THE ENTIRE DIAPHYSIS OF THE TIBIA WAS REMOVED.

By M. MAISONNEUVE.

M. Maisonneuve has laid the following case before the Académie des Sciences:—A young man, whose age is not stated, consulted him in August, 1855, on account of a fearful condition of the right leg, which had been developing itself for two years, in consequence of a fall he had sustained during gymnastic exercise. The limb was treble or quadruple its proper size, and traversed by deep ulcerations, through which the entire shaft of the tibia was felt to be in a state of necrosis. All whom he had consulted, including M. Velpeau, advised immediate amputation. The author, encouraged by the success which had attended former cases, resolved to endeavour to remove the dead bone by a *subperiosteal* operation. Chloroform having been administered, an incision, thirty-five centimètres in length, was carried down the anterior surface of the tibia, penetrating to the bone through the periosteum, which was thickened and already lined by a new, soft, spongy, osseous layer. A transverse incision having been made at each end of this long one, the state of the tibia was carefully examined; and it was found entirely dead throughout its whole length and thickness,—the articular epiphysis alone remaining sound. The mortified bone was then isolated, and with some difficulty removed. All went on perfectly well, only moderate fever followed, the bad character of the suppuration ceased; and after the fortieth day the young patient was able to walk with crutches, as after an ordinary fracture. So complete was the reproduction of the bone, that had the bone which had been removed not been preserved, the reality of the occurrence might have been doubted. At the present time this young man is strong and vigorous, the bad leg in no wise differing from the other, having grown at the same rate as it, and allowing of the most active exercises, such as running, leaping, and the like, without any inconvenience.

The removed tibia was laid before the Academy, and the author states that it is his intention shortly to give an account of the various subperiosteal operations which he has performed, and which he states may be distributed into the following groups:—1. Bones in a state of complete or partial necrosis, with or without their articular surfaces. 2. Bones simply affected by osteitis. 3. Bones suffering from various forms of degeneration. 4. Healthy bones, the ablation of which has been rendered necessary by special circumstances, as, *e.g.*, the formation of an artificial channel in search of a deeply-situated tumour.—*Comptes Rendus*, 1861, No. xi.

[In a subsequent communication to the Academy, M. Maisonneuve narrates the case of a man, thirty-five years of age, in whom, on account of necrosis of the whole of the right side of the lower jaw, he operated the *subperiosteal extraction* of the whole of this bone (leaving the gums and teeth, however, intact), including its vertical ramus with the coronoid apophysis and its condyle—thus leaving the teeth alone suspended by their gums. This occurred in 1854, and now the new jaw is found to be so exactly reproduced that there is some difficulty in detecting the side on which the operation was performed. The teeth, however, after two or three years fell out.]

EXCERPTA MINORA.

Ergot of Wheat.—Some of the Practitioners at Claremont-Ferrand, in Auvergne, have of late substituted the ergot of wheat for that of rye with advantage. It is larger, rounder, and harder than the rye, and its odour is less disagreeable. Attracting moisture also far less than the ergot of rye, it retains its activity after being powdered for a longer period.—*Gazette Hebdomadaire*, No. 28.

Phlegmon after Vaccination.—A case was related at the Société de Chirurgie of a healthy child, two years of age, living in the country, whose life was nearly lost through phlegmonous erysipelas following vaccination with healthy virus. A succession of abscesses formed during six weeks in the axillary and subpectoral regions, while the general symptoms much resembled those met with in meningitis. In the Society this was regarded as an example of a complication which may occasionally supervene after the most trifling operations. M. Robert and various other members expressed their opinion that the chances of consecutive inflammatory accidents would be diminished if much larger intervals were left between the punctures than is generally the case. M. Giraldès, agreeing in this precept, still thought that more importance should be attached to the condition of the health of vaccinated infants, for in the Children's Hospital, the inmates of which manifest great morbid aptitudes, phlegmonous erysipelas is not rare, even after the most carefully executed vaccinations.—*Ibid.*

Poisoning by Strychnine applied to the Punctum Lachrymale.—Dr. Schuler relates an interesting case which occurred in Langenbeck's practice. In a case of amaurosis, in a man fifty years of age, about the twelfth of a grain (less than five milligrammes) of pure strychnine was introduced by means of an ear-pick into the *punctum lachrymale;* but as during this manipulation a portion of the powder was lost, about three milligrammes only entered the punctum. Three or four minutes had not elapsed when the patient's face became livid, and he was seized with spastic yawnings and vertigo. Free admission of air and cold aspersions were had recourse to, and "lavements" (!) were administered. The symptoms continued to increase, as shown by loss of speech and pulse, convulsive respiration, and violent tetanic shocks. Death seemed inevitable, when the severity of the symptoms abated, and after a copious evacuation of urine and fæces, all had passed off in less than half-an-hour. From this fact it is evident that death might be rapidly caused by depositing in the corner of the interior of the eye from 5 to 15 centigrammes of strychnia or salt of strychnia; and supposing the remaining adherent powder to have been cleaned away, the detection of the cause of death might become a matter of extreme difficulty.—*Gazette Médicale*, No. 6.

Artificial Mineral Waters.—M. Constantin James in this paper shows the uncertainty of composition and slight utility of the various artificial mineral waters employed as professed substitutes for the waters of the various celebrated continental sources. Given internally, they are of no medicinal use whatever, save as mere purgatives or as refreshing table-drinks; while when ordered for baths the most varied compositions are employed, and after all nothing analogous to the waters imitated is obtained. Dr. James does not deny that these baths may be of some use, but they should no longer be named after mineral waters they do not resemble, and their composition should be rendered uniform. He recommends for an ordinary *sulphurous bath*, that from 80 to 120 grammes of sulphuret of sodium and a kilogramme of gelatine should be added to the necessary quantity of water. *Alkaline baths* may be formed by a more or less concentrated solution of carbonate of soda, the quantity being greater when it is sought to imitate the Vichy waters, and less for those of Ems. There is no use in trying to more nearly imitate the composition of these waters by adding other substances. *Saline baths* are those which seem more suited for the relief of neuralgic or rheumatic affections, and a solution of chloride of sodium forms the best imitation of these.—*Ibid*, No. 11.

Changes in the Fourth Ventricle in a Case of Diabetes.—M. Luys related to the Paris Anatomical Society, a case of diabetes, which lasted over three or four years. At the autopsy the liver was found somewhat hypertrophied, sensibly increased in weight, deeper in colour, and much congested. The kidneys were somewhat hypertrophied, and very pale, but had not undergone structural change. The anterior wall of the fourth ventricle was found highly vascular, and its consistence notably diminished, very slight scraping bringing off a gelatinous pulp of a brownish yellow colour—the ventricle exhibiting the colour very markedly at certain spots. The lesion consisted in the molecular destruction of the histological elements, and their *débris*, loaded with yellowish granulations, gave to the wall of the ventricle this peculiar

colour. This lesion may be regarded as exactly corresponding to the circumstances proved by experimental physiology, and the study of the traumatic lesions of the cervical region, as capable of leading to an exaggeration of the glucogenic function of the liver, and the consequent passage of sugar into the urine.—*Bulletin de la Soc. Anatom.*, Vol. v. p. 219.

Influence of Lead Poisoning on the Fœtus.—M. Constantin Paul, in continuation of former researches, relates two additional cases, showing the great liability of women to abortion who have to work amid a saturnine atmosphere, as in polishing type and the like. He has now examined 89 individuals with reference to this point, and of these 31 have become pregnant while exposed to the action of lead. These women furnished 141 pregnancies; of these 82 proved abortions, in 4 labour was premature, in 5 the children were born dead. Of the children born alive 20 died during the first year, 18 during the second, 7 during the third, and 1 still later. Fourteen of the children are still living, 10 only having passed their third year.—*Gazette Médicale*, No. 10.

Sinapisms made with Glycerine.—M. Grimault recommends the following formulæ:—Pure glycerine 3½ drachms, starch 5 drachms, and volatile oil of mustard 20 drops; and M. Chevallier publishes the following formula for what he terms *Plastic Sinapisms:*—Volatile oil of mustard 20 drops, white pitch 15 drachms. Having melted the pitch, remove it from the fire, stir in the volatile oil, and spread on leather. By the addition of 10 per cent. of resinous oil the mass can be spread on linen like ordinary adhesive plaister. For use a piece can be cut off according to the size of the part to which the sinapism is intended to be applied. The effect is very speedy, and the proportions of the active principle may be varied.—*Journal de Chimie Méd.*, June, p. 357.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

GERMANY.

Würzburg, June 24.

ON ILLEGITIMATE BIRTHS AND INFANT MORTALITY IN BAVARIA.

I shall to-day give you a few particulars on the proportion of illegitimate births and infant mortality in Bavaria, which present some striking features. Our Gerichtsarzt, Dr. Vogt, who has paid much attention to this subject, is of opinion that the social condition of the country, which is in more than one respect to blame, has to be thoroughly changed before we can expect an improvement of public morality and health. The old system of closed guilds still prevails here, and the marrying and settling in a place is rendered very difficult by the parishes. In no country in Europe, therefore, is the number of illegitimate children so large as in Bavaria. According to M. Boudin, there have been (during the years 1828-37) in Piedmont, in a hundred births two illegitimate ones; in Sweden (from 1831-35), 6·5; in England (1842), 6·7; in Belgium (1842), 6·7; in France (1849), 7; in Prussia (1841), 7·1; in Denmark (1835-39), 7·3; in Hanover (1842,) 7·8; in Austria (1842), 11·3; in Würtemberg (1842), 11·7; in Saxony (1841), 14·9; and in Bavaria (1828-29), 20·5. M. Schraemli has, from more modern data, furnished the following numbers:—Amongst 1000 newly-born infants there are 209 illegitimate in Bavaria, 150 in Saxony, 149 in Bohemia, 76 in Belgium, 73 in Prussia, 71 in France, 59 in Switzerland, 51 in Holland, and 36 in Lombardy. The numbers given by these foreign writers for Bavaria are by no means too high, as is shown by a table taken from Hermann's contributions to the statistics of Bavaria, which refer to the years 1835-44, and 1851-57. During the former nine years 1,094,795 legitimate and 288,441 illegitimate children were born, that is, 209 illegitimate in every thousand; in the seven years from 1851-57, 210 illegitimate births took place in a thousand; the number of them thus showing an extraordinary permanence. It is often said that the increase of the industrial classes of the population is the cause of the increased number of illegitimate births; but the numbers just given evidently refute this view. England, with its immense industrial population, shows only one-fourth of the amount of immorality observed in Bavaria. The same is the case in Belgium, France, and Prussia, where industry is much more developed than in Bavaria. The canton of Zurich has a male population of 48 per cent. of farmers, 34 per cent. of industrial classes, and 18 per cent. of artisans; one illegitimate birth takes place in every 758 inhabitants; and there are only 44 illegitimate children in 1000, while there are 210 such in Bavaria.

The mortality amongst children during the first year of life, is also very considerable in this kingdom. From 1835-44 there were 327,393 deaths amongst legitimate, and 103,676 amongst illegitimate infants; that is, 31 per cent. of all those born, 30·1 per cent of the legitimate, and 35 per cent. of the illegitimate. According to Quetelet, the mortality of infants in the first year is, in Belgium, 14·7 per cent., in England 14·6, in Denmark 17, in Saxony 29, in Bavaria 31 per cent. This excessive infant mortality here may be partly due to the atmosphere and the high position of the country above the level of the sea; but the most important cause is, no doubt, the social condition of the Bavarian people, the antiquated, mediæval state of commerce and industry, the reign of monopoly, the difficulty of obtaining permission to marry, the veto of the parishes, the closed boroughs. Such circumstances are not only pernicious to the natural development of the resources of the country, but also to the life and health of the population. Men in the prime of life, instead of marrying and founding families, are obliged to go into service, as they are not allowed to carry on a business of their own. The common issue of the struggle between passion and morality is only too well known; and thus a multitude of children is born who are a disgrace to the mother whom they bring into misery, and to the father, who is often obliged to emigrate; or the illicit connexion is continued, and the misery only increases with time. If at last some of these men are received as citizens into the parishes, this is generally done at an advanced period of life, when their energies are spent, and there are children which it costs much trouble to legitimise. The family is, at last, often thrown upon the parish, which by its veto, intends to shield itself from burdens, but becomes in the end, by its short-sighted policy, only more heavily taxed than would otherwise have been the case. The members of the families just described generally swell the criminal population of the country.

PROFESSOR LINHART ON PARTIAL AMPUTATION OF THE FOOT.

At one of the last meetings of the Physico-Medical Society, Professor Linhart read a very interesting paper on the above subject. He introduced four male patients, on whom partial amputations of the foot had been performed, with the best success. The first case was one of tarso-metatarsal disarticulation according to Lisfranc; the second one of disarticulation in the tarsus according to Chopart; the two others, amputations with preservation of the posterior process of the calcaneus (or osteoplastic elongation of the leg according to Pirogoff). All these four patients walked firmly on the operated leg, and without feeling the least pain. In the first there was scarcely any deviation from the normal gait to be seen; the third and fourth walked as patients do, if the tibio-tarsal joint is anchylosed; and in the second, on close observation, a sort of double tread was remarked, as he first treads on the tuber of the calcaneus, and then on the anterior part of the soles. This symptom was caused by the tuberositas of the calcaneus being lower down than the head of the astragalus and the anterior process of the calcaneus. Walking was, however, not in the least troublesome.

Professor Linhart said, that the foot, in standing, touches the ground with the tuberositas of the calcaneus and the capitula of the metatarsal bones only; the ligamentum calcaneo-cuboideum and calcaneo-naviculare plantare, which form the vault of the sole, bearing the weight of the body, like the springs do a carriage. The capitulum of the metatarsal bone of the great toe is the greatest and most important part of the anterior support of the foot. This explains why persons, in whom the metatarsal bone of the great toe has been removed, have a more uncertain tread than such in whom two or three other metatarsal bones have been taken away. The shape of the foot is similar to a spire, so that the back of it passes into the external, and the sole into the internal, surface of the heel. From these facts the Professor established the rule that in disarticulations in the neighbourhood of the tarsus, the flaps ought to have an oblique direction, so that an external upper dorsal, and an internal lower plantar flap is to be formed, if

we wish to avoid the inconvenience of drawing the soft parts of the sole into the flap of the back, and *vice versâ*.

The Professor then spoke about the so-called longitudinal amputation. He showed, on a foot just taken from a dead body, how we may, from the interval between the third and fourth toe, divide the foot in two longitudinal halves, of which the external contains the metatarsal bones of the fourth and fifth toe, the os cuboideum and the calcaneus, while the internal half consists of the three inner metatarsal bones, the os naviculare and the astragalus. Such a total longitudinal amputation has never yet been performed on a patient; Professor Linhart, however considers it practicable and likely to answer very well; only there will be very few cases in which it could be indicated. The longitudinal amputations hitherto performed have been confined to the removal of some metatarsal bones with the os cuboideum and the sphenoid bones.

In transverse amputations, the chief rule is to preserve as much as possible of the limb, as experience shows that all transverse amputations yield favourable results. It is much to be regretted that Chopart's operation has been so seldom performed in recent times; there is no tangible reason for this to be found, but it seems to have gone out of fashion. The reasons adduced for neglecting it may be easily refuted; and if in former times frequent relapses of caries, impossibility of walking, and other unpleasant symptoms were observed, the cause was, that the operation after having come into fashion, was performed too frequently and without the right indications. The permanent drawing up of the heel, which has been often mentioned as a consequence of Chopart's operation, is certainly very rare. Professor Linhart has never seen it; in one case only he noticed a slight painful spasmodic drawing up of the heel by the tendon of Achilles.

With regard to the tibio-tarsal disarticulation, the Professor said that the operation according to Jaeger and Syme, with enucleation of the calcaneus, should only be performed if this bone were also diseased; in other cases Pirogoff's method should be preferred. The objections made to this latter operation are entirely unfounded, especially that that the sawed surfaces did not unite. In a patient introduced by M. Linhart, suppuration had set in on these surfaces, and, nevertheless, osseous union took place in the end. The greater length of the limb, after Pirogoff's operation, is very important. The abscesses which may form are of no consequence if at once recognised and opened. The diagnosis of them is, however, not always easy, and frequent observations and examination of the leg and foot is required for it. This circumstance is the chief objection to be raised against the application of the gypsum-bandage in such cases; and it is better to place the diseased foot on a cushion which is hollowed like a groove.

Messrs. Delignerolle and Malgaigne have recommended, and Professors Textor, sen. and jun., first performed, the disarticulation below the astragalus, which has of late become a favourite operation amongst Surgeons. Professor Nélaton, of Paris, is a staunch supporter of it, and it seems that it is likely to become fashionable, as Surgeons are everywhere trying to show the advantages it possesses over Pirogoff's amputation. It has especially been asserted that the medullar membrane is not injured by it, and that the bones will always unite. Such reasoning Professor Linhart considers to be empty and frivolous. It is only in case that an amputation should become necessary for curvature, that there could possibly be a choice between the disarticulation below the astragalus and Pirogoff's amputation. There is now in M. Linhart's wards a girl, suffering from club-foot with ulceration of the whole of the back of the foot. In this case Pirogoff's operation would be less advantageous, because, in consequence of the horizontal direction of the posterior process of the calcaneus, and the shortness of the tendon of Achilles and its surroundings, no corresponding turning of the calcaneus, and therefore no adaptation of the sawed surfaces could be made without removing a considerable part of the bones of the leg and the calcaneus, which would make the leg a good deal shorter.

In cases of wounds and disease, there can be no collision between the two methods mentioned; for if the astragalus, the tibia, and the calcaneus are healthy, the operation according to Chopart should be done, not the disarticulation below the astragalus, nor Pirogoff's amputation. If the tibio-tarsal joint is diseased, and the posterior process of the calcaneus healthy, Pirogoff's method is indicated. Finally, if the whole of the calcaneus should be diseased, we ought to resort to Syme's operation or to the amputation of the leg. The history of Surgery shows that there was an obstinate quarrel about the advantages and disadvantages of Lisfranc's and Chopart's operation; now there is no longer any diversity of opinion regarding them, as one or the other is performed according to the nature of the case under consideration.

From some remarks made by M. Linhart on the excision of single tarsal bones, I only mention that he recommends the excision of all the bones if there are any structural diseases. He does not, however, advise the excision of the astragalus, this being too dangerous a lesion, which should never be inflicted but in cases of dislocation of this bone.

BERLIN, June 26.

PROFESSOR LANGENBECK ON URANOPLASTICS.

AT a recent meeting of the Medical Society of Berlin, Professor Langenbeck introduced a boy in whom he had effected a cure of congenital total cleft of the hard and soft palate by a new operative proceeding. A complete closing of this malformation has probably never yet been attained before. The trials made until now for this purpose may be classed under three different heads:—

1. The separation of the mucous membrane of the hard palate at both sides of the cleft, and union by means of sutures of the parts of the mucous membrane, having been made moveable by lateral incisions. The fragility of the mucous membrane of the palate and its firm adhesion to the bone, especially at the anterior extremity of the hard palate, render this proceeding exceedingly difficult and insecure, while the circumstance of those parts containing very few blood-vessels, generally leads to more or less extensive gangrene of the mucous membrane. In two cases of total cleft of the hard palate in which M. Langenbeck made this operation in 1843 and 1844, the soft palate having been previously cured by staphylorraphy, the separated parts of the mucous membrane perished by gangrene, and he was by this result deterred from all further trials of the kind. The late Professor Dieffenbach has not been more fortunate in his efforts. In 1847, a short time before his death, he wrote to M. Langenbeck saying that the union of the soft palate was all that could be obtained by operation in cases of this kind. Mr. Fergusson, of London, has recently operated in this way with better results, as he succeeded, in small clefts of the palate, especially of the horizontal part of the os palatinum, in closing the defect by separation of the mucous membrane.

2. Implantation of flaps of mucous membrane into the defect. This method, which has been proposed by Krimer and Dieffenbach, is not at all to be recommended. In two cases in which M. Langenbeck tried it, the separated flaps of mucous membrane at once became necrotic.

3. Union of the broken-off edges of the bones of the deficient palate. Dieffenbach was the first to originate the idea of this operation, but he has never performed it himself. In a very large majority of cases, the cleft of the hard palate is unilateral, and there this operation could not be done; because the vomer is grown to one edge of the cleft, and would have to be broken off in order to bring the edges of the defect near each other. The operation may, however, be performed in small bilateral clefts of the hard palate, and M. Langenbeck has done it twice in such instances, but without success. M. Bühring has resorted to this method in the operation of defects of the hard palate, caused by syphilitic necrosis, and has brought about an almost perfect cure; but, in such cases, the circumstances are very different from those of congenital defect of the palate. In total cleft of the hard palate this operation could not possibly be performed, as the osseous substance which is necessary for it is wanting.

The method recently employed by M. Langenbeck consists of separation of the mucous membrane of the palate, together with the periosteum, from the edges of the defect. The osteoplastic operations made before by this Surgeon had given the result, that the mucous membrane of the palate may, together with the periosteum, be extensively separated without the bone or the separated membranes being in danger of necrosis. This fact justified the hope that a separation of these parts from the bone might be employed as a means for closing congenital clefts of the palate; and he expressed this

hope on introducing a successful case of subperiosteal resection to the Society of Physicians. Since that time only clefts of the soft palate had come under his notice, and it was not until a few weeks ago that he had the opportunity of performing uranoplastics on a patient.

This patient, a boy aged 14, has been born with a cleft of the left lip and total cleft of the hard and soft palate together with the left alveolar process. The operation of hare-lip had been done soon after birth, but had failed; and a second operation made about a year afterwards, had been successful. On February 6 M. Langenbeck united first the cleft of the soft palate by means of a needle-instrument especially invented by him for this purpose. On May 11 he closed the hard palate in the following manner:—Close to the edges of the cleft, the mucous membrane and the periosteum of the hard palate were cut through to the bone by means of a strong knife, and the edges of the cleft freshed up. By means of a raspatorium placed into these incisions, the mucous membrane and the periosteum were then drawn off and separated by blunt levers from the two halves of the hard palate. Thus two flaps were formed which were only connected anteriorly with the gums at the alveolar process, and proceeded backwards into the soft palate which had been separated from the posterior margin of the os palatinum. The edges of these flaps were then united by five silken sutures in the median line, and thus the whole cleft, up to the front teeth completely covered up. This separation of the mucous membrane of the palate and of the periosteum is troublesome, but can be done without in any way injuring other parts. The hæmorrhage from the vessels of the periosteum necessitated repeated interruptions of the operation, which was, however, concluded in half-an-hour. After the sutures had been removed, which was done in the course of the second week, the cure by first intention was quite complete in the whole extent of the wound. The healed palate is only distinguished from a normal one by a fine cicatrix visible along its whole extent and a slight indentation at the top of the uvula. In another case of total cleft, in a woman aged 24, who came under M. Langenbeck's care a fortnight afterwards, he performed staphylorraphy and uranoplastics in the same sitting, and with the best result.

LIVERPOOL.

July 13, 1861.

The state of the public health in this town is becoming alarming—from a strictly professional point of view I mean. I am often assured by friends whose veracity I have no just cause to doubt, that they have really nothing to do, and I might write you a much more interesting letter than I fear I shall now be able to do, had not most important diseases been, during the last month, "conspicuous for their absence." This matter is becoming serious personally; for if improvements in sanitary arrangements and in the health of the public are allowed to go on unchecked, what is to become of us?

Might it not be hinted to Sanitarians in general, and to Medical Officers of Health in particular, that there should be moderation in all things; they really should consider that if modern prejudices in favour of vaccination and ventilation, in preference to typhus and small-pox, should lead to the extinction of these two time-honoured institutions, there is no knowing but that their equally venerable relatives, measles, scarlatina, and whooping-cough, might be the next victims of the antipathy—may we not say the morbid antipathy?—now existing in many otherwise well-informed circles, against these ancient and respectable pathological conditions; and then "what next, and next?" Public health is unquestionably a very good thing in its way; but if in the blind pursuit of this object no respect is to be had to "vested interests," and if in the next generation the members of our noble Profession be reduced to a condition analogous to that of frozen-out gardeners, or "poor mechanics who have got no work to do," why, all I say is, that the sanitary party will have a great deal to answer for; and as this view of the subject may not have occurred to them before, perhaps it might be as well if they would give it the consideration which it deserves. However, such items of news as the past very uneventful month has furnished, I must now try and give you.

The Southern Hospital, after a thorough course of airing, whitewashing, and painting, is again open for the reception of patients, and on the 18th inst. the first stone of the new Lying-in Hospital was laid by the Mayoress The new building will afford twenty-five beds and accommodation for out-patients. A portion of the Hospital will be set apart for diseases of women—not puerperal. Especial care has been taken as to ventilation, about 1700 cubic feet of space being allowed for each patient, and the windows being extended completely to the ceilings of the wards. Arrangements as to the reception of patients are so made that each one who is in a fit state shall have a bath before going into a ward, all the patients' clothes being passed down a shoot into the wash kitchen, and thence to a drying closet, thus obviating one risk of the introduction of infection. The estimated cost, including the land and furniture, is £5000, of which the Treasurer has now £3500 in hand.

At the Infirmary two cases of stone were operated upon by Mr. Bickersteth, rather more than a fortnight since. One, a boy, from whom a large mulberry calculus was easily removed by the ordinary lateral operation. He has since completely recovered. The other, a man somewhat beyond middle age, on whom lithotomy had been performed three times, and lithotrity twice before. In this case, Buchanan's angular staff was used, but did not seem in any manner to facilitate the performance of the operation. The stone was readily seized, but being large and rapidly formed was crushed by the forceps in the process of extraction. The bladder was well washed out and cleared of the *débris*, and until the fifth day the case progressed very well, he then had rigors, became feverish, then comatose, and died on the eighth day. At the post-mortem examination both kidneys were found extensively diseased, and one containing a large calculus. The mucous membrane of the bladder was thickened and unhealthy. The prostate had been but very slightly incised, so that there had not been any urinary infiltration; the condition of the kidneys fully accounting for the man's death.

At the Northern Hospital,—where, from the multitude of sailors received from almost every nation under the sun, we find scurvy, dysentery, and the various forms of intermittent fever very common in the Medical wards,—there was a case of intermittent fever recently, under the care of Dr. Collingwood, in which, for some weeks, quinine and arsenical preparations were administered in vain, and in which the remarkable phenomenon of the coincidence of cinchonism with the ague fit was observed. Dr. Collingwood has also in his wards a case of yaws (frambœsia). The patient, an athletic negro, "raised in Baltimore," as he says, had a chancre four months ago, which was soon well. About a fortnight since, when at sea, an eruption appeared principally on the chin, axillæ, pubes, and arms. There was not so much constitutional irritation as usually exists in the outset of this disease. There is scarcely any rheumatic pain, and no sore throat; but there is considerable local irritation, especially when he is warm. The raspberry-like appearance of the rash in the axilla is very well marked. He is using the ung. hyd. biniodidi externally, and taking iodide of potassium in five-grain doses. Among Dr. Waters' patients is a most interesting case of paralysis of sensation, with only partial paralysis of motion, following a blow on the head.

There was, some time since, under Mr. Chalmers care, a case of fungus hæmatodes of the knee-joint, remarkable as being in a girl only fourteen years of age. The Surgeons were unanimous in their desire to amputate the limb; the father, however, refused his permission. She went home, and was afterwards admitted into the Workhouse Hospital, where she now is. The disease has extended as far as the groin; the thigh has now a circumference of twenty-six inches, and there is extreme tenderness of the abdomen, as well as commencing ulceration of the skin a little above the knee. A very similar case in a boy about the same age is now under Mr. Long's care in the Infirmary. In this instance it is proposed to amputate at the hip-joint if the consent of the father can be obtained; but, unfortunately, the fungus hæmatodes being, like time and tide, not in the habit of waiting for any one, is rapidly advancing, and fast diminishing the already somewhat limited space from which flaps of healthy structure could be obtained.

The records of the Northern Hospital, or indeed of any of the Liverpool Hospitals, include a sadly large proportion of cases due to crimes of violence among sailors,—sometimes from

brawls among themselves, sometimes from the treatment which they receive at the hands of captains and mates at sea.

The Mercantile Marine numbers among its officers many of the best and bravest men that ever were afloat; but it includes also some of the most reckless and most merciless ruffians that ever disgraced humanity. I suppose that the exercise of the necessarily despotic power possessed by officers at sea, while it elicits the good points of a good man, develops whatever latent ferocity exists in a bad one.

A case now under investigation here will, I hope, not pass unnoticed. It seems that the second mate of the *Severn* had fever at the Brass River: he is told that he is not fit for a mate's duties, and is put to those of an able seaman. He is knocked down several times to begin with; and when he is too weak to scrape a mast, the captain beats him with the main brace. Next day he is told to clean the mizen-mast, and not being able to do so, he is knocked down by a blow on his head with the captain's fist. The day after, for being unable to steer alone, he is struck "with the spanker boom-sheet," and this is followed by the encouraging remark, "if I kill you, there is no one in Liverpool to speak about it." About the day but one after, the sick man is dragged out of the forecastle by his legs, and it is not surprising that next day the steward tells the captain "Jones very bad—him sick too much," so sick, poor fellow, that he died that night. "When the captain was told Jones was dead, he ordered him to be stitched up and brought out, and the captain gave witness the Prayer-book and said, 'Read the service over Jones, I am sick.' The captain was not present when Jones was 'launched.'"

Such a history needs no comment, but does it not suggest the necessity of some more enquiry than is now made into the causes of death on the high seas? If there were an Inspector specially charged with the duty of verifying by personal enquiry, the alleged cause of every death, I believe that a considerable check would be placed on these barbarities.

In connexion with a mutiny which took place rather more than six months since, a most singular case occurred. A man, who was among the mutineers, and who has recently left the Infirmary, had a pistol fired at him by the captain within a very short distance. The patient did not know with what it was loaded, he only knew that he dropped at once with a considerable wound in the neck. The power and sensibility of one arm were lost, and his neck became stiff, and though he recovered the use and feeling of the arm, the stiffness of the neck, and pain on any attempt at movement, remained. He was obliged to hold his head with both hands on lying down or rising up, and had just the look of a man suffering from caries of the cervical vertebræ.

For a long time no evidence of the presence of a foreign body could be detected in the neck; but at last Mr. Bickersteth, feeling convinced that there was something, and that it was most likely embedded in the vertebræ, an incision was made over the site at which it was supposed to exist. The finger could be passed into a hole in the arches of the cervical vertebræ, and then a foreign body was distinctly felt, it was soft; it might have been the wad of the pistol, or a piece of the man's clothing, but evidently was not a ball. Attempts were made to extract it by means of forceps; but in the confined space allowed by the aperture, and in such close proximity to the spinal cord it was not deemed expedient to use much force, or to compromise the patient's safety by any prolonged manipulation, and the efforts at extraction were abandoned as soon as it was evident that the body would not readily come away.

Next day the man's throat was much inflamed, and presented a diphtheritic look, and especially in one part a greyish patch of exudation was very marked. He was troubled with a cough, and on one occasion, feeling something as if it were at the top of his throat, made an effort and coughed out—perhaps the last thing that could have occurred to the most imaginative of Surgeons to anticipate—an intervertebral substance entire, with a few granules of bone adhering to it. It had probably been dislodged by the explosion—for the pistol cannot have been loaded with ball—and, being driven forward, there was no pressure on the cord, which, therefore, recovered the functions which the shock had for the time abolished. From the time of the extrusion of the cartilage the patient rapidly improved; the pain and stiffness of the neck disappeared, and he left the Infirmary well. I hope that the full details of this interesting case may be published.

Another case worth recording is that of a man who, in the solution of a "difficulty" at New Orleans, on January 6, received two wounds with a bowie knife, one over the left scapula, another just below the angle of the right. The former was comparatively superficial, the latter must have penetrated the lung, since, according to the patient's statement, wind came out of the wound, and blood came out of his mouth when he coughed. He was in the Hospital at New Orleans for some weeks, and left well, though with a small opening in the site of the wound, and a slight stiffness about the right shoulder joint. He worked his passage home, and then was admitted into the Workhouse Hospital, under the care of Mr. Fletcher. A probe passed into the opening which still remained, came upon something rough, near the angle of the scapula, which felt more like a fragment of necrosed bone than anything else, and a pair of forceps being passed along the track through which the probe had gone, this something was easily seized; but, on attempting to remove it, it became evident that something much larger than the fragment of necrosed rib or scapula which had been expected, was in the grasp of the forceps, an incision was made upon it, and a piece of the blade of a bowie-knife was extracted, measuring three inches in length, nearly one inch in breadth, and weighing three drachms and twenty-two grains. The steel was blackened, much eroded in some places, and covered in others with brownish yellow crusts, not removed by washing in water. The look of the fragment being almost exactly that of a piece of steel that has been burnt in a common fire.

In the Lying-in Ward of the same Hospital, a case of paralysis of one leg, after delivery, happened recently, and may be interesting in connexion with the prosecution to which Mr. Ed. Halford was subjected in consequence of a similar occurrence. The patient, a strong, healthy woman, aged 22, was delivered on June 6, after a labour of twenty-two hours' duration, without any aid whatever. She made a perfectly good recovery, with this single exception, that she complained, first of numbness, and then of loss of power, in her right leg. She is now able to walk, but drags her leg, and the sensibility of the skin, especially about the ankle, is much diminished.

A case of poisoning by naphtha was brought to the Northern Dispensary on one of Mr. Desmond's visiting days this week. A boy, about 4 years of age, found a bottle of naphtha, and seems to have put it to his mouth and taken a drink out of it. Not being detected in the very act, the child stoutly denied at first that he had taken anything. He became extremely sleepy, and then passed into a state of profound coma, in which condition he was taken to the Dispensary. Sulphate of zinc was administered without any effect. The fluid contents of the stomach, which had a most offensive odour of naphtha, were removed by the pump, and the stomach was well washed out with warm water; but for some time the child remained with contracted pupils, cold surface, and flaccid muscles, until after the cold douche and friction had been liberally applied both to his chest and back; he vomited a mass of undigested bread, soaked, of course, with the naphtha, and after having been for three hours apparently *in articulo mortis*, his sensibility gradually returned, and he completely recovered.

I may mention that, since my last letter, another case of infant death from "overlying" has occurred, in which it was possible to establish, by legal evidence, the fact of the child being found dead underneath the mother. She has therefore been committed for trial on a charge of manslaughter. Two other somewhat unusual cases have come under the notice of the Coroner during the last few days: one in which a lad went to sleep close to a lime-kiln, and was suffocated by the vapour from it; and another, in which a man died from the effect of the bite of a lion in the Zoological Gardens.

July 17.

Yesterday Mr. Long amputated (at the hip-joint) the thigh of the patient above referred to as suffering from fungus hæmatodes. Very little blood was lost, and to-day the boy is, I am informed, as well as could be expected.

The captain of the *Severn* has been committed on a charge of manslaughter in Jones' case, and other cases against him will now be brought forward.

GENERAL CORRESPONDENCE.

THERAPEUTIC ACTION OF ALCOHOL.

LETTER FROM MR. JAMES FOWLER.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is not in the nature of things that a man can judge of an essay, or of its parts, as well from the perusal of a short abstract as from the careful hearing and discussion of the whole; nevertheless, I presume that when in speaking of Mr. Liveing's paper "On the Therapeutical Action of Alcohol," you state that he gave as one of the beneficial effects of its use, "the diminution in the waste of the tissues of the body," the meaning of those words cannot easily be misunderstood.

Those who hold this theory usually attempt to prove it by fact rather than by argument. They point triumphantly to one or other of the excretions of the patient, and tell us that the materials indicating "waste of tissue," are more or less diminished in quantity, adding that the amount of waste of tissue is capable of being estimated by analysis of the excretions.

Granting that Mr. Liveing is able to define which are the excretions of the body relatively to the tissues, and having so defined, that he is able accurately to analyse sweat, urine, fæces, expired air, etc. (for all must be included); and granting further, that by such a difficult process he is really able to measure waste of tissue in health and under normal circumstances, surely it does not follow that the same test should be available under totally different conditions. Nor do observation and experience fail to confirm the dictate of one's reason. It is well known that for some time before a paroxysm of gout, there is deficient excretion of uric acid by the kidneys; but do the masses of urate of soda found in the tissues after the explosion, justify the conclusion that therefore there had been less uric acid in the body to be excreted? Certainly not, any more than the deficiency of nitrogenous products in the urine of the drunkard proves that there is any "diminution in the waste of the tissues" of his body.

After the elucidation which this subject has received from Mr. Simon, I conceive that such young theorists as Mr. Liveing and myself are inexcusable if we wander from the truth. There can be no doubt now that "alcoholic stimulants retard the excretory changes of tissue, and tend to produce an artificial diathesis in which the organic substance is unduly loaded with refuse."

As Mr. Liveing has himself proved that "the action of alcohol cannot be regarded as essentially different in health and disease," it is needless to state that the differences between the action of alcohol when the patient takes it on his own responsibility and when it is administered by his Physician, can only be differences of degree.

But let us suppose, with Mr. Liveing, that "the waste of tissues" is really diminished under the use of alcohol; the healthy textural drainage of the body being at the same time carried on. What interesting matters, then, for speculation are the facts that consumers of alcohol are so liable to affections universally attributed to imperfect defecation of the body; so very peculiarly predisposed to inflammation; so subject to high degrees of inflammatory fever; so apt to suffer from gangrene and sloughing; so prone to die from speedy exhaustion!

Trusting the great interest of the subject will excuse my presumption in offering these suggestions,

I am, &c. JAMES FOWLER,
House-Surgeon to St. Thomas's Hospital.

SOCIETY OF ARTS.—This influential Society, at its recent annual meeting, awarded its silver medal to the following gentlemen:—Dr. Edward Smith, for two papers "On Alcohols and Teas;" Mr. A. K. Isbester, for a paper "On the Hudson's Bay Territories;" Mr. Alexander Redgrave, for a paper "On Textile Manufactures;" Dr. Milligan, for a paper "On Tasmania;" Mr. Charles Ledger, for the Introduction of the Alpaca into Australia; Mr. F. Joubert, for a New Process in Photography.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JULY 3, 1861.

DR. TYLER SMITH, President, in the Chair.

(Continued from page 50.)

A Paper, by Dr. R. UVEDALE WEST, was read, entitled

A PRACTICAL INQUIRY WHETHER THE ERGOT OF RYE, WHEN ADMINISTERED TO THE MOTHER DURING LABOUR, IS DANGEROUS OR NOT TO THE LIFE OF THE CHILD.

In December, 1855, the Author published the particulars and results of an inquiry similar to the present—to the effect that, in a series of 69 cases in which he had administered the ergot of rye on a gross total of 278 labours, 9 children were still-born, viz. 2 putrid at birth; 2 born after labours which were preceded and accompanied by hæmorrhage; 1 born footling, with hydrocephalic head, and consequent fatal compression of funis; 1 in which there was evidence of latent compression of funis; 1 a difficult primiparous forceps delivery; 1 a difficult vectis delivery, the mother seriously ill from excessive œdema; and 1 born dead without any assignable cause. In consequence of certain criticisms on this paper which were published in France, accounting variously for the results, and challenging the Author to continue the inquiry on the same plan, one of the critics, Dr. Danyau, on the part of the Imperial Academy of Medicine, maintaining that, unfavourable though the results appeared to be to him, yet a similar report on a like number of cases would probably be more unfavourable still, Dr. West continued to tabulate his ergot cases as he had begun, with the results which he now begged to lay before the Society:—Between December 23, 1855, and June 22, in the present year, on a gross total of 734 labours attended by the Author, the ergot was given in 172 cases, including 1 case of twins, so that there were 173 children born under the effects of ergot of rye. Of these, only 5 were still-born from all causes—viz., 3 putrid at birth; 1 with placenta prævia and profuse hæmorrhage—premature; and 1 with prolapsed funis, detected an hour after the ergot was given, the operation of turning, which was then immediately performed, having been too late to save the child's life. The Author urged that, in reply to Dr. Danyau's precise challenge, he might fairly have rested contented with the results of the first 69 cases of this second series, in which there was not a single still-birth from any cause; but he considered that that fact, when compared with the unfavourable result of 9 still-births in the preceding series of 69 ergot cases, proved only that 69 was too small a number to form a correct conclusion from, and therefore he went on with the inquiry until it was spread over a gross total of 1013 labours, on which number the ergot was given in 241 cases. Of that number of 241 ergot cases, including 242 children born, there were, adding the 9 of the first series to the 5 of the second, 14 still-births from all causes—viz., 5 putrid at birth; 1 footling; 1 prolapsed funis; 3 hæmorrhage during labour from placenta prævia; 2 difficult instrumental deliveries; 1 suspected latent compression of the funis; 1 cause not manifest. On the whole number of births—1013 labours, and 1029 children born, including the series without ergot as well as that with ergot—there were 50 still-births, of which 5 were born dead without any manifest cause. So that, inasmuch as only 1 of those 5 was born under the influence of ergot, that medicine having been given in the greater proportion of 1 in 4¾ of the whole number of labours, the Author thought there was no sufficient evidence in the facts he had accumulated to justify the doctrine that ergot of rye was dangerous to the life of the child. As to the mother, the Author found the following results on a retrospect of the gross number of 1013 labours—viz., 7 deaths within the lying-in month, of which one occurred with a patient who had had ergot of rye; 18 cases of incarcerated placenta, of which 5 were after ergot of rye; 25 instances of post-partum hæmorrhage, of which 5 were after ergot of rye; 30 cases of puerperal disease or disorder, of which 9 were after ergot of rye. So that he was led to the conclusion that

ergot has little or no influence in either causing or preventing parturient or puerperal accidents or diseases. At the same time he wished to remark, that probably in proportion as ergot might improve uterine action, certain accidents which depended on deficient uterine action, such as past-partum hæmorrhage and after-pains, might be controlled by ergot of rye. The Author concluded his paper with the observation that the tables before the Society appeared to prove that it was immaterial in what stage of the labour the medicine was given; whether the os uteri was rigid or supple; whether the liquor amnii was or was not evacuated; or whether the mother was multiparous or primiparous; but that it was essential that actual labour should be present, as well as that the accoucheur should be competent to meet any emergency that might arise, just the same as when ergot has not been given; that ergot was useful wherever it was desirable to improve uterine action; and that it could be dangerous only where uterine action would be dangerous, as, for example, in a case of arm presentation after the liquor amnii was evacuated, as then it would make turning more difficult.

Mr. Grailly Hewitt thought the Society was under very great obligations to Dr. Uvedale West for the valuable paper now read. He felt bound to say that the details given were most complete, and conclusions drawn by the Author appeared to be most fully borne out by the data afforded. So far as these cases went, the innocuity of the ergot given must therefore considered to be proved. With reference to the main question, it was impossible to consider what effect ergot has in producing still-birth without also considering what are the causes of still-birth generally? Observations recently placed on record by certain German authorities conclusively proved that, in a certain number of cases, children are still-born own to intra-uterine respiration. Respiratory action was induced while the child was still in the uterus; the consequence being aspiration of amniotic fluid, meconium, etc., and suffocation. One of the causes of such intra-uterine respiration was probably the introduction of air from without acting on the surface of the child, and inciting respiratory action. At all events the fact was undoubted, as pointed out by Schwartz, that such respiration might occur, and Breisky particularly had recorded cases in which examination of the child and the presence of aspirated matters in the air-tubes placed this beyond a doubt. It was therefore very important that in cases of still-birth this possible cause should be eliminated before the death was attributed to ergot, or indeed to any other cause.

Dr. Tyler Smith, while expressing the highest opinion of Dr. West as an accoucheur, felt obliged to dissent from his views in regard to the administration of ergot during labour. He could not consider the facts of his paper sufficient to outweigh the proofs which could be adduced to show the bad effects of ergot on the child. Dr. Ramsbotham's large fœtal mortality in cases of the induction of premature labour by means of ergot, and the enormous experience of the Dublin School of Midwifery, already proved that ergot considerably increased the rate of fœtal deaths. The statistics of Drs. Hardy, M'Clintock, Johnstone, and Sinclair, extending over many thousands of cases, were so convincing upon this point that it was a rule in the Dublin Lying-in Hospital to deliver the child by the forceps if it was not born within twenty minutes after ergot had been given. It might be a question whether ergot acted as a poison to the child, or whether it caused asphyxia by persistent contraction of the uterus; but of its deleterious influence he had no doubt. In his own practice he gave ergot to bring away the ovum in cases of abortion, and he always used it in cases of actual or threatened post-partum hæmorrhage, but he rarely, if ever, gave it during labour. He thought it might be laid down as a rule that ergot was a post-partum, but not an ante-partum remedy. He believed it could never be given safely except under circumstances in which the forceps were applicable, and he preferred the forceps, because, properly handled, they involved no risk either to the mother or the child. It appeared to him that Dr. West's conclusions were not borne out by his own statistics. With ergot he lost one in seventeen children; and without it, one in twenty—a difference of about one per cent.

Dr. J. Braxton Hicks, without entering into the question of the poisonous influence of ergot upon the child, felt sure that those who had seen much of consulting practice in poor districts would bear him out in the assertion that occasionally the effect of that remedy was to cause the continuous contraction of the uterus in the circular direction, rather than in the longitudinal, whereby the child was so tightly clasped that is perished from pressure on the funis, although the pelves were of ample size.

Dr. Barnes thought that no subject was more worthy of discussion by the Society than the causes of still-birth, and Dr. West had brought forward the question of the influence of ergot upon fœtal life in a most admirable manner. Still, he could not agree with Dr. West's general conclusion. He had entire confidence in the researches of Drs. Hardy and M'Clintock. These gentlemen had proved by auscultation that the heart began to intermit in its action soon after the exhibition of the ergot, and before any mechanical pressure was exerted upon the child's body. The toxicological influence of the ergot seemed established. But he had observed direct injurious effects; he had seen, more than once, the child driven with such violence through the pelvis as to rupture the perinæum. It was an inconvenience attending the use of ergot that from the moment it was given the Practitioner lost his control over the labour; the action of the uterus might be excessive, and could not be moderated. The mortality of one in seventeen under ergot, related by Dr. West, must be regarded as excessive; it equalled that in the Dublin Lying-in Hospital, where an unusual proportion of putrid children were born. The proportion in the Maternity Charity, where the patients were delivered with probably as little interference as possible, was three per cent. Dr. Granville, in his paper in the last volume of the "Obstetrical Transactions," gives about two per cent. as the proportion of still-births. He believed that wherever this proportion was much exceeded some abnormal cause acting unduly upon fœtal life might be suspected.

Dr. Hall Davis observed that the conclusion he had arrived at from an experience of thirty years was, that the ergot of rye was a powerful agent. He had seen one case, if not more, where rupture of the uterus was distinctly traceable to its exhibition in a small pelvis, and he had seen other evils from its use in improper cases. In his district of the Royal Maternity Charity he had a rule to restrain the midwives from using it without his permission in any case of protracted labour. He was not satisfied that we had proof of the poisonous influence of the ergot, although an examination of the blood in the still-born fœtus might enlighten us in this respect. He believed that the mortality of the children, which is certainly increased by its use, is chiefly due to its being given in cases of much resistance to the birth; and that the deaths are the result of pressure upon the child's body placed between the two opposing forces,—that of parturition unduly excited, and that of an unyielding obstacle,—and also of the circumstance that the uterine efforts occasioned by the ergot are continuous, instead of being divided by those intervals of relaxation and rest observed in natural labour, and so essential to the safety of the child.

Dr. Chowne regarded the paper as valuable, and he thought Dr. West's conclusions more favourable than were to be expected. His impression, however, was, that the ergot of rye required caution in its use. He did not think it exerted any poisonous effect upon the fœtus, at least he had never seen anything to countenance such a conclusion; but by the continuous uterine contraction which it caused it might do harm.

Dr. Uvedale West, in reply, observed that the different speakers had not addressed themselves to the facts of the paper, and that many of the remarks were consequently *hors de la cause*. With respect to the danger of the ergot in cases of rigid os uteri, he had no proof of it; it was very remarkable that, by a critic writing in the *Gazette Hebdomadaire*, this circumstance was stated as explanatory of the immunity of his (Dr. West's) saved children. The President's caution as to the necessity of delivering within twenty minutes after the ergot was given would be shown to be needless, if the tables were studied, the interval having been many hours in cases where the children were born alive. Lastly, he would observe, that the only object he had in bringing the subject forward was to arrive at the truth.

The following observations were made in reply to the remarks of other speakers reported in our last Number:—

Dr. Tyler Smith would not fail to communicate the

results of any further cases in which the stump and ligature were returned into the pelvic cavity. He had not adopted this plan in the case related without much consideration. The rapidity with which the peritoneal surface threw out lymph for the repair of injuries was very remarkable, and upon this he had depended. The patient made the best recovery he had seen. He quite agreed with the truisms contained in Mr. Brown's remarks. He did not oppose the use of opium in cases attended by pain, but he did object to its free exhibition as the rule, in the way formerly advocated by that speaker. Only one of the cases was unilocular. He knew of no diagnosis which could separate cysts of the broad ligament from ovarian tumours, consisting of one large cyst and a number of rudimentary cysts ready to grow after the first had been dealt with.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS, July 11.

VACCINATION BILL.

On the motion that the House resolve itself into Committee on this Bill,

Mr. T. Duncombe moved as an amendment that the Bill be committed that day three months. He said that the measure contained provisions deeply affecting the feelings of the labouring classes of this country, and involved a breach of faith on the part of the Government, who had on a former occasion promised that no further legislation of a compulsory nature on this particular subject should take place until after a Parliamentary inquiry. Different opinions prevailed as to the efficacy of vaccination, and, though much might be done by persuasion with the working classes, yet they would not allow their children, in order that a particular theory might be carried out, to be compulsorily vaccinated with, perhaps, polluted matter, taken from another person's arm, which matter might introduce into the system the seeds of scrofula, consumption, and other diseases. Parliament would be exceeding its power if it attempted to do this by an Act, and he was of the opinion expressed by the late Sir R. Peel, that the proposal to make vaccination compulsory was contrary to the spirit of independence in which the British people rightly gloried. (Hear.)

Mr. Lowe said the interests involved were of such transcendent importance that he could not refrain, in reply to the hon. member, from placing a satisfactory and triumphant case before the Committee. In 1853 Parliament passed an Act for compulsory vaccination, and that Act was for a time in operation; but as there was a defect in the Act, arising from the want of a provision by which those who prosecuted under it might obtain their expenses, the Act fell into desuetude. In 1859 he introduced a Bill to make the Board of Health perpetual, and that Bill contained a clause remedying the defect he had just mentioned, but being pressed by the hon. Member for Finsbury on the subject, he, in order to pass the Bill, gave up the clause. It was a bitter reflection to him that he gave up the clause, but had he not done so he believed that he should have lost the measure altogether; yet he was convinced that the abandonment of the clause had occasioned the loss of many thousands of lives in this country. He was therefore determined to attempt to remedy this defect; and if the House would not support him, upon the House must fall the responsibility. (Hear, hear.) He was almost ashamed to take up the time of the House by arguing respecting the efficacy of vaccination. From 1837 to 1840 the deaths from small-pox amounted to 12,000 a-year; from 1840 to 1853, during which period vaccination by the Poor-Law Boards was established, the annual average of deaths was only 5,200; so that it appeared that the diffusion of vaccination had reduced the mortality by more than one-half. Then came the period when the compulsory law came into operation, and its first effect was remarkable. The number of vaccinations enormously increased, and the deaths diminished. In 1854 they sank to 2808. In the next year the deaths sank still lower, amounting only to 2525. Afterwards they gradually increased up to the present time, the Act having, as he had already explained, fallen into desuetude, and thus the efficacy of vaccination was satisfactorily established. (Hear, hear.) In 1859 and 1860, when there was a small-pox epidemic in London, and when the Act of 1853 was found not to work, the Board of Health, doing that which was rather irregular for a public office, set up an agitation to induce the Boards of Guardians to supply the deficiency of the law, and the report of the Medical Officer confirmed what the Board of Health knew before—that when vaccination fell into neglect the small-pox showed itself to be the same terrible pestilence as before Jenner made his valuable discovery. (Hear, hear.) The first effect of this agitation was that the vaccinations in London were raised to five times their average amount, thus showing the enormous amount of neglect which had existed in respect to this matter. Would the House be doing wisely, after being made acquainted with the verdict of so many eminent Medical men, now to appoint a Committee of Inquiry on the subject? (Hear, hear.) He had mentioned that the terrible malady of small pox, whenever it attacked children of tender years, fell heavily upon them, and that vaccination was a protection against it; and now let them consider what a great responsibility it would take upon itself, if, in the face of the almost unanimous opinion of Medical men, to which he had just referred, it left unvaccinated children—who could exercise no discretion of their own on the subject—to perish, and also to communicate a dreadful contagion throughout the country. (Hear.) It would be profaning liberty, self-government, and independence, to say that any man had a right to set up his own sordid or brutal prejudices against such an opinion—(hear, hear)—and these were his reasons for advocating compulsory vaccination. As to the alleged objection of the poor of this country to such a proposition, he saw no proofs of it. He was assured by his inspectors throughout the country that the Unions were glad to see them in every case without exception, and that their advice was cheerfully listened to. He was also informed by them that there was no indisposition on the part of the people to vaccination. Ignorance and apathy were found to exist, but he was quite satisfied that if once the people understood that the law which required children to be vaccinated was to be carried into execution it would not be necessary to enforce the law, for it would be obeyed as a matter of course. (Hear, hear.) Rules were issued requiring boards of guardians to contract with no one but Medical men for the purpose of vaccination, and no deputies, except of the Medical Profession, would be allowed. (Hear.) The efficiency of vaccination was becoming greater and greater every day, owing to the beautiful discovery that its security could be increased almost indefinitely by increasing the number of punctures. But if there were no means of improving the effect of vaccination, still, under any circumstances, it was an enormous boon to man, for out of 1000 persons who took small-pox without being vaccinated, 350 died, while out of 1000 who, after being badly vaccinated, took the small-pox, only 150 died, and out of 1000 who were well vaccinated, and afterwards took the small-pox, only five died. The Bill which he wished to pass into law was very simple. All that it enacted was that the Poor-law Boards might appoint persons to prosecute under the Bill those whom the Medical officers reported ought to be prosecuted, and to allow the expenses of prosecution to be paid out of the poor-rates, unless the magistrates should be of opinion that the information was improperly brought. He confined the power of recovering the expenses to official persons in the next clause, which provided for the appropriation of the penalties, and on these simple provisions turned the whole question, whether compulsory vaccination should prevail or not.

Mr. Mitford cited an instance taken from a parish in the Union with which he was connected, in which eighteen births had during the last half-year taken place, and only two children had been vaccinated. He hoped, therefore, that Government would succeed in carrying out the measure under discussion, inasmuch as the present system of vaccination was wholly inefficient.

Mr. Lowe wished to supply some figures which in the course of his remarks he was unable to lay his hands upon. He found that the number of deaths from small-pox was—in 1856, 2227; in 1857, 3336; in 1858, 6460; while in 1859, owing, he believed, mainly to the exertions made in agitating the question, the number had fallen to 3840.

Mr. Coningham was of opinion that the State had no right to interfere in the mode proposed by the Government. The names of Medical men of eminence had been quoted by the

right hon. gentleman in support of his views; but the saying, "There is nothing like leather," might be applied to the Medical as well as to other professions.

The House then went into committee on the Bill.

Mr. AYRTON said that the Chinese principle of punishing a man with the view of compelling him to make another obey the law had never been acted upon in this country, and he did not think it would be wise to adopt it now.

Mr. DUNCOMBE objected to parents being held responsible until their children arrived at the age of 21. There ought to be some limit—three or five years.

Mr. LOWE thought that so long as a parent might be considered to have a legitimate control over his child, and to be answerable for its conduct, the law should hold him responsible. He did not become more entitled to consideration because he had neglected his duty for a great number of years.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, July 11, 1861:—

Garnham, Devereu John, Lowestoft
Langworthy, William Froude, Modbury, Devon
Tanner, Richard Tanner, Painswick, Gloucestershire
Winstanley, Clement, Exeter, Devon

The following gentlemen also on the same day passed their First Examination:—

Dunderdale, William, St. Bartholomew's Hospital
Gardner, Edward Barton, St. Thomas's Hospital
Hubert, Theodore Kelsall, Halsey-street, Chelsea
Robinson, Hugh, King's College
Rowe, Thomas Henry, King-street, Regent-street
Rutherford, Samuel, Middlesex Hospital
Saul, William, Banbury
Woodruffe, Daniel, St. Bartholomew's Hospital

The following are the names of gentlemen who passed their Examination in Classics and Mathematics, on the 16th and 17th of July:—

Barraclough, Robert W. S., Streatham-hill
Barrett, Howard, Richmond
Bath, Henry, Glastonbury
Bermingham, George Ritchie, Morton-villa, Kentish-town
Blick, T. E., Northampton Infirmary
Burnley, Isaac, Leeds
Chmery, Edward Fluder, Lymington, Hants
Clements, George, Brixham, Devon
Colborne, Anthony C., Tachbrook-street
Cooke, Alfred S., Gloucester
Coombe, Frederick Sydney, London
Creswell, John Charles, Bromsgrove, Worcestershire
Croft, John Henry, Bury St. Edmunds
Currow, John, Penzance, Cornwall
Davie, John C., Merton, Surrey
Davies, Herbert, Llanybyther
Davies, S. H. W., Chalford, Gloucestershire
Denziloe, William Le Gros, Allington
Dyer, William Thistleton, London
Ellis, William H., Cambridge
Evans, Ernest R., Hereford
Harkeck, Paul, Truro, Cornwall
Hodges, Francis Henry, Stapleton, near Bristol
Howard, Frederick R., Halesworth
Hughes, David, Greek-street, Soho
Humphreys, Horace Thomas, Birmingham
Iliffe, William, Nuneaton, Warwick
Jackson, Frederick William, York Gate-house
Jenkins, Evan, Llandyssul
Jones, John Day, Castle-house, Torrington, Devon
Jordison, C., South Ockendon, Essex
Leah, Thomas, Penzance, Cornwall
Lewis, Charles, Woodlands-terrace
Lucas, George, Burwell
Lucas, Robert Harry, Burwell, Cambridge
Mackenzie, Stephen, Woodford, Essex
McKellar, Alexander, Bearfield, Bradford
Mausley, G. W., Atherstone, Warwick
Morgan, Richard, Abereroboi, Aberdare
Morison, Joshua W., Portelew, Pembroke
Norris, Henry Frederic, Charmouth, Devon
Parkes, Henry Mackenzie, Guy's Hospital
Plowman, Richard, Bridgewater
Priest, Frederick, North Walsham
Proctor, Charles Edward, Ely
Pryce, Richard M., Cainsoos, Montgomeryshire
Quick, John, Penzance
Sanders, George Cooper, Moulton, Northamptonshire
Sansome, Thomas, Birmingham
Shelton, Haswell D., Bromyard, Hereford
Silvester, Robert Ratcliffe, Brighton
Simpson, Spencer Henry, Stowmarket
Stothard, James, Hull
Sutcliff, Edward, Camberwell
Tattersall, William James, Blackpool, Lancashire
Taylor, Isaac, York
Tindale, W. R., Bedale, Yorkshire
Trimnell, Edward Alfred, Isle of Man
Turner, Frederick, Sheffield
Upton, Herbert Chrippes, Steyning
Wade, Charles, Cross, Somersetshire
Webster, Thomas James, Conway
White, John Campbell, Princes-street
Williams, Robert Henry, Llanrwst.

APPOINTMENTS.

PENNINGTON.—Abel Frederick Pennington, M.R.C.S. Eng., L.S.A., has been appointed to succeed Mr. Newbold Pickford, as House-Surgeon to the Ardwick and Ancoats Dispensary, Manchester.

PRICE—SMITH.—Peter Charles Price, M.R.C.S. Eng., of Green-street, Grosvenor-square, and Henry Smith, of Caroline-street, Bedford-square, Fell. and M.R.C.S. Eng., have been elected Assistant-Surgeons to King's College Hospital.

DEATHS.

BRETT.—December 10, 1859, from congestion of the brain, at Back Creek, Amherst, Victoria, Frederick Harrington Brett, formerly a Surgeon in the East India Company's Bengal Service.

CLARKSON.—July 7, Frederick Clarkson, of Westcliffe, Whitby, Yorkshire, M.R.C.S. Eng., L.S.A., aged 26.

HUGHES.—July 13, William Lewis Owen Hughes, of Vine-street, Stretford-road, Manchester, M.D. Edin., L.R.C.S. Edin., aged 37.

KING.—July 11, Joseph King, of Lewes, Sussex, formerly of Clarence-square, Brighton, M.R.C.S. Eng., L.S.A., aged 38.

MCDONNELL.—May 6, of brain fever, at the Mountain Hospital, Ascension Island, Randall McDonnell, Assistant-Surgeon, R.N. (Seniority, March 29, 1854.)

MARSTON.—July 6, suddenly, Henry Marston, of Glamford Brigg, Lincolnshire, M.R.C.S. Eng., L.S.A., aged 53.

SOMERS.—July 6, in London, Henry Somers, M.D., Surgeon of the 55th Regiment of Foot.

STONE.—July 16, Charles James Stone, of Clifton-road East, St. John's-wood, M.R.C.S. Eng., aged 25.

VERMER.—July 9, Edward Donovan Verner, of Piccadilly, M.D., late of the Royal Artillery, aged 67.

ROYAL COLLEGE OF SURGEONS.—At a meeting of the Council on the 11th inst. Mr. Cæsar Hawkins was elected President; Mr. Luke and Mr. Skey were elected Vice-Presidents of the College for the ensuing year, and Mr. Gulliver, was elected Professor of Comparative Anatomy and Physiology in the vacancy occasioned by the resignation of that office by Mr. Savory.

BIRMINGHAM EYE INSTITUTION.—We learn from the Annual Medical Report for 1861 that during the past year 3992 out-patients have been relieved at the Institution; exclusive of a considerable number of accidents and urgent cases which have been relieved without tickets. 277 patients have been admitted into the wards of the Charity. The Medical Committee give the following Report of Operations: For cataract—by extraction, 54; by solution, 26; total, 80. Operations on iris—Artificial pupil, 9; iridectomy and displacement of pupil, 34; iriddessis, 5; other operations, 27; Medical cases not requiring operations, 76; total, 151. Miscellaneous operations—Excision of the globe, 23; incision of the ciliary muscle, 6; intra-ocular myotomy, for short-sightedness, 5; ditto, for conical cornea, 2; ditto, for amblyopia, 2; staphyloma, 5; grooving the conjunctiva, for lippitudo, 3; total 46.

DAVID GRIFFITHS JONES, a diminutive, spare man, with a profusion of beard and moustache, described as a Surgeon, of 43, Woburn-place, who recently figured in a will case in the Probate Court, and astonished the jury with his evidence and antecedents, was charged on Saturday before Alderman Hale with feloniously forging and uttering a document purporting to be the will of Sophia Bellis. Mr. Giffard, instructed by the Solicitor to the Treasury, who conducted the prosecution at the direction of the Attorney-General, said he did not intend to go into all the details of the case on the present occasion; his object being to adduce sufficient evidence for the purpose of a remand. The first charge would be for forging and uttering the will of Sophia Bellis on February 14 last, and which the prisoner sought to prove a few days ago, when the jury refused to believe his evidence. He (Mr. Giffard) should be able to prove that Sophia Bellis was at the time totally incapable of making or signing a will,

and also that the signature was not in the handwriting of that lady. The last allegation he should prove by her bankers, who would give evidence upon a future occasion. Mr. Humphreys, the solicitor for the prosecution, said he had exhibited the alleged will to five persons in the banking establishment where Sophia Bellis banked, and he should be able to show that the signature was not in her handwriting. Mr. Giffard then asked for a remand. Mr. Sleigh, who appeared for the prisoner, opposed an adjournment, for though he was desirous that every investigation should be made into the circumstances of this case, still he felt that there was at present no evidence at all pertinent to the serious charges at issue. It was therefore a great hardship on his client to deprive him of his liberty, and it was quite as easy for witnesses to have been brought forward at once to prove what was alleged. The attesting witnesses to the will were now present, who would prove the handwriting of the testatrix. He hoped, therefore, that this gentleman would not be any longer detained in custody. Alderman Hales said Mr. Sleigh's arguments had failed to convince him that he ought to liberate the prisoner. It was his determination to remand him. Mr. Sleigh urged the magistrate to accept bail, but this was refused, and the prisoner was remanded.

TURKISH APOTHECARIES AND DRUGGISTS.—"Until now I have only spoken of certain Specialists, and I might, therefore, be asked what persons take upon themselves the treatment of the other diseases which have not been mentioned? At a time when only now and then a stray European Doctor came to Turkey, the treatment of internal diseases was almost exclusively in the hands of Apothecaries, or rather Druggists. In the purely Turkish parts of this city there are even at this moment no end of hole-and-corner Apothecaries' shops, which are mostly kept by Spanish Jews—the most ignorant quacks in existence. The Turks call them Yandi Hekim (Jewish Physicians) and have absolute confidence in them when they are ill. These persons visit the patients and furnish them with medicines, by the sale of which they gain their livelihood; for they do not receive a special fee for their attendance. Their authority has, however, somewhat decreased of late, as now Greek, Levantine, and Armenian Apothecaries, who have acquired some knowledge of pharmaceutics, but who are not regularly educated, have opened Apothecaries' shops according to European fashion in different parts of the town, and have at the same time commenced exercising the Medical Profession. The practice of these latter is not only among the Turkish parts of the population, but also among the Armenians, Greeks, and even the Levantines of the European quarter of Pera. They are the family attendants of high Turkish dignitaries; their claims are greater than those of their modest Israelite colleagues, and several of them have amassed a not inconsiderable fortune. There is scarcely an Apothecary in this city who does not also practise Medicine, as they are obliged to do so by the popular voice. The reasoning is this: Whoever trades with anything, must, of course, know all the properties of his merchandise; and thus the Apothecary must know which of the remedies in his shop to apply in a given case; and his customers would find it very strange if the Apothecary would refuse to prescribe that remedy which can cure the disease in question."—*Extract from a Private Letter from Constantinople.*

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 13, 1861.

BIRTHS.

Births of Boys, 945; Girls, 957; Total, 1902.
Average of 10 corresponding weeks, 1851–60, 1533·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	553	553	1106
Average of the ten years 1851-60	532·2	494 8	1027 0
Average corrected to increased population..	..	..	1130
Deaths of people above 90	1	..	1
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,269	1	9	5	2	11	4	13
North ..	618,181	..	4	7	..	10	6	17
Central ..	377,794	..	4	5	1	4	6	14
East	570,898	2	1	2	..	14	4	23
South ..	772,892	1	3	11	6	18	7	20
Total.. ..	2,803,034	4	21	30	9	57	27	87

BOOKS RECEIVED.

A System of Surgery. Vol. II. London: 1861.
The Surgical Diseases of the Eye. By H. Haynes Walton. London: 1861.
Health and Disease. By E. Smith, M.D. London: 1861.
The Springs of Aix-la-Chapelle. By A. Reumont, M.D. London: 1861.
Transactions of the Medical and Physical Society of Bombay. Bombay: 1861.
Nature and Art in the Cure of Syphilis. By T. Weedon Cooke. London: 1861.
Gout, Rheumatism, etc. By E. D. Moore, L.R.C.P. London: 1861.

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

"He that questioneth much shall learn much."—*Bacon.*

NURSE TRAINING.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Can any of your readers inform me at what place in London, and upon what terms, a *Nurse* could receive three or four months' training in obstetric as well as general duties? I am, &c.
Fulbeck, Grantham, July 17. W. NEWMAN, M.D.

"IN FRANCE THE EXAMINATIONS ARE PUBLIC, BY WHICH MEANS JUSTICE IS DONE TO ALL."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—There would seem to be a great gulf fixed between a student and an examiner, so thoroughly does the latter ignore the feelings which must have agitated him in his younger days. It must be a well-known fact that the majority of men are very nervous at an examination, some more so than others, but very few unaffected. Picture to yourself, Sir, a nervous man thrust into a room and desired (amidst much clatter) to analyse *two* liquids in *a quarter of an hour*. Supposing every assistance were afforded, it would be a trying task; but, when nothing is to be found but by the vigorous searcher, and there is no person to give information, it becomes perfectly absurd to expect its fulfilment. It has yet to be shown that the best chemist is he who can use his hands fastest. At the Preliminary Scientific Examination now being carried on at Burlington-house, the above is a sample of the examination. The majority of the candidates have done nothing (as might be expected); but can it reasonably be supposed that the majority are unable to test for one acid and one base? An institution like the University can offer no excuse for mismanagement of such nature, as there are always rooms and chemicals to be obtained without any ruinous expenditure.

The insertion of this may be of some value to future aspirants.

I am, &c, T. B. R. S.

Examination at the London University.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—May I be allowed to call attention to the manner in which the Practical Chemistry has been this day conducted at the Preliminary Scientific Examination at the London University?

I believe a fair statement of my case will represent that of at least two-thirds of the Candidates present, although many came under even greater difficulties than I did. Then, to be as brief as possible, I received a paper to inform me that in fifteen minutes I must analyse quantitatively two saline compounds, and report thereon immediately afterwards. I asked for hydrosulphuric acid, but was informed that it would be requisite for me to make some. This I was unable to do on account of its being impossible to break the sulphide of iron in pieces small enough for the neck of the apparatus without a hammer or some heavy instrument. I then found some hydrosulphuric acid, already made by another gentleman, and being unable to make any, I thought it no injustice to use this, but it was immediately taken from me by some one of the officials. I now asked for hydrosulphate of ammonia, which I was told was not in the room.

Thus, being deprived of two most valuable reagents, I proceeded with other tests, and ascertained the presence of an alkaline earth and the absence of lime, strontia, and baryta, but was unable to find any phosphate of soda to confirm my suspicion that I was dealing with magnesia. Arrived thus far, and going on to test for the acid, the bell rang for operations to be suspended. Many of the tests that were present were in bottles, whose stoppers we were unable to extract, many necessary ones were absent or not to be found, and what were present were all mixed without any order whatever. The room was not large enough, or, if large enough, was over-filled with officials, and, to sum up, we were interrupted by a *vivâ voce* examination held in the same room.

I trust that my complaint is not unjust, and that, if such a cause of complaint has crept in accidentally, all due care will be taken by our University authorities to prevent a recurrence of it.

Allow me to mention that all the rest of the examinations, viz. the written and *vivâ voce*, were well conducted, with perfect order and regularity.

I am, &c.

A Candidate.

Mr. Mackley's Case.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—On reading the evidence of Mr. James Field, quoted from the *Times* in your last week's Journal, and resulting in a verdict of "wilful murder" against Mr. W. Randall Mackley, I could not but feel surprised that Mr. Field, after drawing from his friend of sixteen years' standing all the circumstances connected with this most unfortunate case, should offer him the perusal of two works on Midwifery, thereby rendering him the assistance he sought. How much more friendly it would have been to have intimated to Mr. Mackley, as policemen do to their prisoners, a caution that whatever he said would be taken down and used as evidence against him. Had Mr. Field followed this plan, how many painful reflections would he not have saved himself for having drawn out his friend and fellow-pupil so far and so fatally.

I am, &c.

Rugby, July 16. Save Us from our Friends.

Our Hospital System and Special Diplomas.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The exclusives of this place, notwithstanding the severe strictures passed on them a short time since by the Medical and other papers, hold most tenaciously to their evil ways, as will be seen by the following advertisement:—

"Royal South Hants Infirmary.—A Special Meeting of Governors will be held at the Infirmary on Monday, July 29, at 1 o'clock, p.m., to Elect a Dentist to that Institution. Candidates are required to be resident in Southampton, and to possess the diploma of some legally constituted body. Information respecting the duties of the office can be obtained of the Secretary, to whom the diplomas of candidates are to be sent on or before July 20, 1861."

Pray let your influence bear against them. The spirit of the age is against monopolies, and I believe that our Hospital system has improved more tardily than most other things. If we wish to destroy patients congregate a large number in a huge building with a small Medical Staff.

What with a poisoned atmosphere and a want of proper supervision, the mortality is necessarily very high. Hospitals to do good must be multiplied, as well special as general. The cottage system will prove to be correct, and the smaller the number of beds in a single building, say not more than ten, the greater will be the success of our practice. Erysipelas, pyæmia, and other low forms of disease consequent on poisoned blood will then be almost unknown to the Medical Practitioner.

Whence the motive which permits our Hospital Surgeons to tolerate the present system? Their operations in private practice convince them of its rottenness. How tardy and feeble their exposures of the evil! And how little do the philanthropic non-professionals understand sanitary principles!

The College of Surgeons ought never to have granted a Dental Diploma, it will eventually create much confusion. The trick at our Institution of requiring the legal qualification excludes several practical and highly respectable dentists and restricts the holding of the position to one firm. This is really too bad!

I am, &c,

Southampton, July 17. Edwin Hearne.

Chloroform in Delirium Tremens.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I think it is an error to say that chloroform may not be administered at all in states of intoxication, delirium tremens, etc. What does every week of Hospital practice show us? that the worst surgical cases of smashed bones, ankles, hands, etc., requiring immediate amputation occur in subjects intoxicated, or on the verge of delirium tremens, or who at once fall into it or into a disease almost similar, delirium traumaticum, from mental "shock" as soon as they are admitted into the Hospital. The part played by the nervous system is very curious: thus every practical Surgeon has known such cases go from bad to worse, notwithstanding the utmost care,—the patient is delirious and without sleep till such a trifling matter as even his pipe of tobacco is restored to him, and he has his accustomed sleep—his delirium vanishes. If tobacco, chloroform, or opium soothes his system he ought to have it, he is in almost the exact condition of a female in puerperal mania, where sleep is the one grand cure; but chloroform is always a bad agent to give as a mere narcotic; it is not a narcotic at all.

I mentioned nine cases of death from chloroform in delirium tremens at a late meeting of the Medical Society of London, so that one cannot disregard the very serious risk the Surgeon runs in administering it in such cases. I think, however, cases of delirium tremens like that of Mr. Dobbie are best cured by tartrate of antimony and opium. It is easily given, thrown into the fatal gin or beer the patient is so attached to, it almost always secures sleep: once you have had sleep for the patient you need not be afraid of chloroform. A patient with fracture of the leg and violent delirium tremens was admitted one day, not long ago, into Guy's Hospital, the fractured ends of the bones were only prevented going through the integuments by his being kept under chloroform, but with opium it cured the delirium tremens also, as well as allowing good apposition of the ends of the bones.

I am, &c.

Sackville-street, Piccadilly, July 15. Charles Kidd, M.D.

Another Hint.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you allow me to suggest to "Medicus," of Bolton, that he should apply common white paint with a brush every two or three days to the patient's foot.

I am, &c.

July 11. M.R.C.S.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the *Medical Times and Gazette* of June 29, your correspondent "Medicus" asks advice regarding a squamous and ulcerative disease of the foot and leg.

If "Medicus" will make sufficient inquiry, I doubt not but that he will find that there has been considerable neglect on the part of the patient as to bandaging, position, etc., which a practice mostly composed of such cases, extending over more than twelve years, has taught me to be, without strict watching, an almost universal error on the part of the patient.

I think "Medicus" will find the following, if strictly enforced and steadily persevered in, of considerable benefit:—Strict attention to the general health, and say from three to six grains of Plummer's pill every second or third night, at bed-time; and as local treatment (1) a lotion of nitrate of silver of about eight grains to the ounce of distilled water, applied with camel-hair pencil once a-day, after washing with tepid water and the mildest Windsor soap; and after the lotion a little ointment composed of one part each of finely-powdered camphor and white oxide of zinc, and eight or ten parts lard, applied *s. a.*, and over that a pretty strong and firm calico baudage, three inches broad, and from eight to eleven yards long (according the length and thickness of the leg) very evenly and firmly applied from the ball of the great toe to below the knee insisting at the same time that the leg never be put in a position with the foot less than from two to three inches higher than the knee (not even for a few seconds) except when the bandage is on, and even then let the foot be kept up as much as convenient.

I am, &c.

98, Montrose-street, Glasgow, July 10. D. R. Wyllie.

COMMUNICATIONS have been received from:—

Professor Simpson; Dr. R. Lee; Dr. Marcet; Dr. Martyn, Bristol; Dr. Gray, Oxford; Mr. Brake; Mr. Solomon, Birmingham; Mr. C. Heath; Dr. Thomson; Dr. E. Smith; Dr. Harries, Bombay; Dr. Blackley, Trinidad; Registrar-General, Edinburgh; Census Commissioners, Ireland; Dr. Mushet; Mr. Fowler; Mr. Wyllie; Mr. Condy; Dr. Hearne; Dr. Duncan; Dr. Newman; Mr. Rivers; and our Correspondents at Dublin, Liverpool, Erlangen, Rome, Florence, Turin, Zurich, Würzburg, and Berlin.

APPOINTMENTS FOR THE WEEK.

July 20. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.

22. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

23. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

24. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

25. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

26. *Friday.*

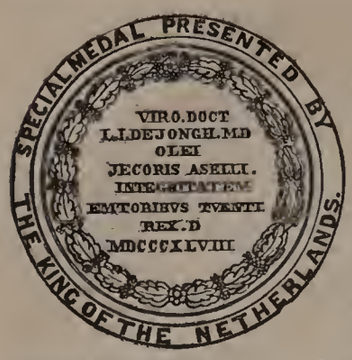
Operations, Westminster Ophthalmic, 1½ p.m.

Samaritan Free Hospital Lectures, 4 p.m. Dr. Mitchelson "On Amenorrhœa."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed this day (Saturday) at 2 o'clock:—

By Mr. Fergusson—Removal of Epithelial Growth from Mouth; Removal of Breast; Amputation of Penis; Ligature of Nævus.



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Dr. BARLOW, Physician to Guy's Hospital:—"I have been well satisfied with the effects of Dr de Jongh's Cod-liver Oil, and believe it to be a very pure Oil, well fitted for those cases in which the use of that substance is indicated."

Dr. LANKESTER, F.R.S., late Lecturer on the Practice of Medicine, St. George's School of Medicine:—"I consider that the purity and genuineness of this Oil are secured in its preparation by the personal attention of so good a Chemist and intelligent a Physician as Dr. de Jongh, who has also written the best Medical Treatise on the Oil with which I am acquainted. Hence I deem the Cod-liver Oil sold under his guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

Dr. COWAN, Senior Physician to the Royal Berkshire Hospital:—"The material now sold varies in almost every establishment where it is purchased, and a tendency to prefer a colourless and tasteless Oil, if not counteracted, will ultimately jeopardise the reputation of an unquestionably valuable addition to the Materia Medica. Dr. Cowan wishes Dr. de Jongh every success in his meritorious undertaking."

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F. WALTERS having originally invented these Urinals, begs to warn the Profession of the many bad and useless imitations which are now sold, and he would advise them, before purchasing, to look that they are stamped with his name; as, unless that be the case, he cannot guarantee them.

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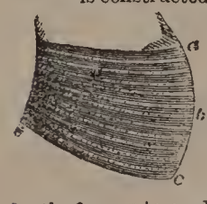

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Pepsine.—M. Boudault begs to state

that he cannot be answerable for the purity and strength of any Preparation sold under his name unless obtained from his sole Agent, Mr. PETER SQUIRE, Her Majesty's Chemist, 277, Oxford-street, London, to whom all applications respecting it must be addressed.

Second Edition of Boudault on "Pepsine," with Remarks by English Physicians. Edited by W. S. SQUIRE, Ph.D., published by J. Churchill, London, may be also had of the Author, 277, Oxford-street, price Sixpence.

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Or SACCHARATED CAPSULES.—Copaiba and Cubebs are, doubtless the best remedies, but these drugs are of a repulsive taste and odour, and occasion colicky pains, nausea, and gastric disturbance. M. Jozeau has succeeded in rendering these valuable therapeutic agents perfectly innocuous, by incorporating, in his Copahine, all the curative properties. This preparation has been adopted by the Paris Academy of Medicine, after more than a thousand trials in Paris, and the different London Hospitals, viz., St. Thomas's, Guy's, and St. Bartholomew's, under the care of Messrs. Lloyd, Poland, and Le Gros Clark. "Lancet," Nov. 6, and Dec. 10, 1852. The Copahine, which is in form of a pretty pink sugar-plum, effects a cure in about six days, either in recent or chronic diseases. 100 Capsules, 4s. 6d., at G. JOZEAU'S, French Chemist, 49, Haymarket, London; 22, Rue St. Quentin, Paris; and all the most important Chemists.

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ORIGINAL LECTURES.

LECTURES ON THE SPINAL CORD,

DELIVERED AT

The College of France,

DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,

Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture XVIII.

ON THE INFLUENCE OF THE NERVOUS SYSTEM ON ABSORPTION.

Summary: The Action of the Nerves is invariably connected with Muscular Contraction—Absorption, viewed in a Physical light, is merely the Result of Endosmosis—The double Current, however, which is characteristic of this Physical Action, does not take place in the Vessels as long as the Blood is in motion; an inward Current alone is observed—The outward Current, or Exosmosis, is produced when the Blood stagnates in the Vessels—The Process of Absorption slackened when Circulation is retarded—Magendie's Experiments—The Absorption of Poison suspended by a Ligature upon the Vessels—The same Effect is produced by the Application of Galvanism to the corresponding Nerve—Experiments which prove this—The Influence of the Nervous System upon the Phenomena of Absorption entirely due to its Action upon the Vessels—The Fatal Effects of Abstinence in Animals which have undergone the Division of a large Branch of the Sympathetic Nerve explained by the over-activity of the self-absorbent Process.

Gentlemen,—In the preceding Lectures, we described the influence exerted by the nervous system upon the chemical phenomena of life. The muscles and glands have been selected for this purpose, these tissues being, in fact, the most convenient for similar experiments; but there can be no doubt that modifications of the same kind are produced in the bones, in the ligaments and tendons, and, in short, in all parts of the living body.

It now remains for us to enter into the study of a different class of phenomena, which also lie under the control of the nervous system, and the importance of which cannot be too highly estimated. We allude to absorption, one of the principal functions of the economy, in which the interference of the nerves is no less visible than in the production of heat, or the changes of the blood: and, on going into the subject, you will find that in this case, as in all others, the muscular element is the medium through which nervous power is exerted.

Let us consider the vessels which spread over the walls of an organic cavity, in which the process of absorption is carried on, for the time being; these vessels may be viewed as hollow cylinders, containing fluids; and the absorption operated through the vascular parietes, is, in a physical sense, the result of endosmosis. You are aware, that in fluids separated from each other by a porous membrane, an exchange takes place: two opposite currents are then produced; the first passes into the vessel itself (endosmosis); and the second, from the vessel into the surrounding liquid (exosmosis). Now the difference of intensity between these two currents is termed the endosmotic equivalent.

Such being the phenomena observed out of the body, if we endeavour to ascertain those which occur within the living frame, when absorption takes place, it will be found at once that the above-mentioned double current is not produced; when, for instance, liquids are poured into the intestinal tube, and absorbed by its villosities, no exchange whatever is observed; the liquids contained in the intestine pass at once into the vessels, which do not allow any part of their contents to escape. This difference between the phenomena which arise in living animals, and those observed in inorganic matter, is due to the rapid motion of the fluids contained in the absorbent vessels; the torrent of circulation carries off the liquids which bathe this outer surface, without restoring an equivalent, according to the ordinary laws of endosmosis, because in the normal state the flow of blood is continuous. But if we arrest its progress by placing a ligature on the vessels, the results obtained are strictly similar to those observed in the endosmometer; the exosmotic current is then produced as usual, both fluids being placed in a state of rest. Under these circumstances, albumen, salts of soda, and other substances contained in the blood, find their way out of the vessels, and are chemically ascertained to exist in the fluids which surround them.

But without definitively arresting the motion of the blood, it is quite sufficient to retard its progress in order to create a diminution in the intensity of these endosmotic phenomena; when, on the contrary, the local circulation is accelerated, absorption continues with still greater rapidity than before; the activity of this function entirely depends, therefore, upon the rate at which the blood passes through the capillaries. Magendie has proved that on tying the vessels after poisoning a limb, the toxic agent produces none but local effects, until the ligature is removed, and that if, instead of tying the vessels, we simply compress them, so as to slacken the passage of the blood, without entirely suspending it, the effects of poison are less rapid in their evolution, although the fatal result ultimately takes place.

The modifications produced by mechanical impediments, by ligatures placed upon the vessels, can also be created by acting upon the nerves; if, for instance, the ear of a rabbit is plunged into a solution of yellow prussiate of potash, this substance is soon discovered in the animal's urine, having been absorbed by the vessels, and expelled by the kidneys. But when the cervical branch of the sympathetic nerve has been divided, the rapidity with which the result is obtained is much greater; the difference is equal to a third of the time which elapses in the first case. The influence exerted by the nerves upon the process of absorption is rendered evident by this experiment; and on injecting strychnia into the vessels of the injured part, the division of the sympathetic nerve is found to accelerate the symptoms of poisoning in the same proportion.

It may be asked, What are the effects of a similar operation? What influence does the division of a single branch of the sympathetic nerve exert upon the whole system? The reply is not difficult; an acceleration of the capillary circulation is produced, and absorption is in consequence carried on with additional intensity; but if, on the contrary, we intend to lower its activity, the nervous system again enables us to do this without difficulty; when the divided nerve is galvanised, during the immersion of the animal's ear in the above-mentioned solution, the slowness of absorption becomes so great, that it requires twice the usual space of time to allow the prussiate of potash to appear in the urine in sufficient quantities to be detected by the usual tests.

We meet, in this case, with a direct interference of the nerves in the process of absorption; and this action is evidently not exerted upon the particles of matter which pass into the vessels, but upon the capacity of these natural recipients, and the rapidity with which the blood passes through them. You perceive at a single glance, how absurd were the notions formerly entertained with reference to the elective power and positive discernment of the absorbent vessels, and how simple an explanation does away with such erroneous interpretations of vital phenomena.

The application of these views to pathology, leads to several highly important results; and we cannot drop the subject, without reminding you of the fatal effects of abstinence, in cases where an important branch of the sympathetic nerve has previously been divided.

As long as the animal is kept in good condition, the symptoms observed are entirely local; circulation is accelerated, absorption is carried on with greater activity, and the temperature rises in the part which corresponds to the operation. This state of things continues almost indefinitely, till some morbid cause makes its appearance. If the animal is momentarily deprived of food, inflammatory symptoms speedily arise in the organs withdrawn from the action of the organic nervous system; when the cervico-cephalic branch has been cut, the conjunctiva, the pituitary membranes, and other mucous surfaces enter at once into suppuration; and the lungs, the pleura, or the great internal viscera become the seat of disease when the operation has been performed on the corresponding ramifications of the splanchnic nerves.

The influence of the nervous element upon the phenomena of absorption satisfactorily explains the pathological manifestations which result from this experiment. There exist, in fact, two kinds of absorption, an external and an internal one; the first exerts its power on the liquids contained within the

chief natural reservoirs, the second acts upon the tissues themselves, and gives rise to the uninterrupted exchange which takes place between this histological element and the component parts of the blood: now, we are fully convinced that this *self-absorbent* process is carried on with additional intensity after the division of the sympathetic nerve; for the vital energy of all tissues is evidently increased after this operation; muscular irritability is higher than in the physiological state, as the application of the graduated galvanic apparatus will show; and nervous sensibility also rises in this case, as the following experiment evinces: if a current of air is blown through a fine tube on the conjunctiva, the eyelids are closed on the injured side, while no unpleasant sensation appears to be felt in the other eye, which remains open.

It will therefore be easily understood, that the blood being impoverished through privation of food, the animal begins to feed upon itself; and the tissues, no longer receiving the nutritive elements which support them in the physiological state, are rapidly destroyed, more particularly so in the parts where the intensity of absorption is carried to its utmost pitch. Another result of our experiments, which the preceding considerations have no doubt enabled you to foresee, is that after the section of the sympathetic nerve, the blood contains a larger amount of fibrin than usual, and is more easily coagulated, as in the case of ordinary inflammation.

The nervous system, therefore, plays an important part in all the phenomena which take place in the economy, whether in health or in disease; and the agent through which it is enabled to interfere in all the modifications of life is invariably the same—viz., the muscular element.

ORIGINAL COMMUNICATIONS.

PRACTICAL HINTS ON THE ACCOMMODATION OF THE EYE, ITS ANOMALIES AND THEIR TREATMENT.

By Mr. J. SOELBERG WELLS.

Hypermetropia.

Continued from page 648.

Hypermetropia is very frequently latent. If its degree is but slight, it is often perfectly latent till the age of twenty-five or thirty, when symptoms of asthenopia begin to show themselves, if the patient is obliged to work for any length of time at near objects. Our suspicion is aroused by these symptoms, and on placing a convex glass before his eyes, we find that he can distinguish distant objects far better than without it. If the glasses be only momentarily held before the eyes, the existence of hypermetropia may escape us, for the patient has been so accustomed to exercise his power of accommodation, even for distant objects (in regarding which the normal eye does not accommodate almost at all) that he cannot at once relax his accommodation. But if he continues to look through the glasses for a few minutes, he gradually finds that the distant objects become more and more distinct, and clearly defined. In order to make sure to what degree the hypermetropia exists, and to what extent the person is obliged to exercise his accommodation in looking at distant objects, we must paralyse his power of accommodation by the instillation of a strong solution of atropine.

The hypermetropia may be so great that it is never latent, even in childhood it makes itself felt, and vision of distant objects is improved by convex glasses. In these cases it is always accompanied by a diminution in the range of accommodation, and on this account, even at an early age, two pairs of spectacles will often be necessary, a stronger pair of convex glasses for reading, writing, etc.; a weaker pair for distant objects.

It is a curious fact that when the hypermetropia is considerable, the patient can often read better when the print is only a short distance from the eye, than when it is 10″—12″ off. Von Graefe thinks this is due partly to the diminution in the size of the pupil which takes place on looking at small objects, for the area of the pupil being smaller, some of the peripheral rays are cut off, and there is consequently a diminution in the circles of dispersion on the retina. He has also shown that on approximating an object to the eye, the circles of dispersion on the retina in a hypermetropic eye, increase comparatively less in size than the size of the retinal images. In consequence of this, there is more chance of interspaces between the letters when the print is held at a distance of 5″—6″ than at 10″—12″. At the latter distance, there would not be so much difference between the size of the retinal images and the circles of dispersion, so that the letters would appear more confused and indistinct. But besides these reasons, Donders thinks that the greater amount of convergence, and consequent increase in the action of the power of accommodation, has some influence in enabling the patient to see better at a distance of 5″—6″.

When speaking of presbyopia, we mentioned that according to Donders, the near point begins to recede from the eye at about ten years of age, and that this recession continues uninterruptedly to advanced age. He has found that the far point remains stationary till about the age of forty or forty-five, then it gradually recedes from the eye; at fifty-five or sixty this is distinctly evident in the originally normal eye, the eye has become hypermetropic, and a convex glass is necessary for distinct vision of distant objects. But this differs much in different individuals. At seventy or eighty years of age the hypermetropia often $= \frac{1}{24}$. Donders considers that this recession of the far point—this diminution of refraction—is due to changes in the structure of the lens, which becomes firmer and more consistent, and its surface somewhat flatter with advancing years.

We have seen that the near point also recedes from the eye, that at the age of 45 it was about 9″—10″ from the eye, and we followed Donders in considering presbyopia to commence when the near point was removed further than 8″ from the eye. A hypermetropic eye may, therefore, at a certain age, become presbyopic; or again, an originally normal eye may become presbyopic at the age of forty-five, and hypermetropic at fifty or sixty, so that we may have presbyopia and hypermetropia co-existing in the same eye. If, with the glasses which neutralise his hypermetropia, a hypermetropic patient cannot read very small print nearer than 12″—14″ from the eye, he is also presbyopic. Let us suppose that convex 16 is the glass which neutralises his hypermetropia, which enables him to see distant objects distinctly without any effort of accommodation; on telling him to read No. 1 of Jäger with this glass we find that the nearest point at which he can do so with ease is 12″. The amount of presbyopia therefore $= \frac{1}{24}$; and as convex 16 is the glass which neutralises his hypermetropia, the latter $= \frac{1}{16}$, and he will require convex 16 for objects lying between 12″ and infinity, and a stronger glass to bring his near point nearer than 12″. This is easily found by the equation $\frac{1}{7} = \frac{1}{24} + \frac{1}{16} = 9\frac{3}{5}$. But convex 10 would, on account of the influence of the convergence of the optic axes, be found somewhat too strong. Hence convex 12 would most probably be the fitting glass.

The range of accommodation of a hypermetropic eye is easily found. We must first change it into a normal eye by furnishing it with that convex glass which will enable it to see distant objects distinctly without almost any exercise of the accommodation; and then, still wearing this glass, find the nearest point at which it can read No. 1 distinctly and easily. If the patient requires for distant vision convex 20 before the instillation of atropine, and convex 10 after it, we should try his nearest point with a glass between the two—No. 16, for instance(a), for No. 10 would be too strong. He has been so accustomed to strain his accommodation that he cannot all at once really command his near point with convex 10.

Let us now suppose that with convex 16, his near point (p) lies at 7″; his far point (r) has been found to be at an infinite distance (∞); for he can see distant objects well with convex 16 without much effort, although convex 20 is best. This range of accommodation (A) is to be found by the formula, $A = \frac{1}{p} - \frac{1}{r}$. Now $p = 7''$, $r = \infty$, hence $A = \frac{1}{7} - \frac{1}{\infty} = \frac{1}{7}$. His range of accommodation $= \frac{1}{7}$.

When we have gradually accustomed the eye to the use of stronger and stronger glasses for distant vision, and have finally gone over to the use of the glass which completely neutralises the hypermetropia (which is convex 10 in our

(a) I need not point out the necessity of waiting until the effect of the atropine is thoroughly gone off, which may take five or six days, before testing the range of accommodation.

supposed case), we may try the range of accommodation again with this glass.

I am well aware that this plan of finding the range of accommodation is not mathematically exact. But it is by far the simplest and quickest proceeding, and sufficiently accurate for all practical purposes. And as my object in these papers is to make the subject of which I am treating as simple and practical as possible, I have purposely abstained from entering into elaborate formulæ, and somewhat intricate questions and experiments.

Let us now consider the method of suiting hypermetropic patients with spectacles.

We must first discover the amount of the hypermetropia before atropine, by letting the patient read No. 19 or 20 of Jäger at a distance of 20 feet. Let us suppose that convex 20 is the strongest glass with which he can read No. 19 fluently and distinctly. His hypermetropia before atropine therefore $= \frac{1}{20}$. We then try the nearest point at which he can read No. 1 comfortably; this is found to be 7″. He is, therefore, not presbyopic. In order to find out to what extent he has strained his accommodation in reading No. 19 through convex 20, and to know what glass will completely neutralise the hypermetropia, we paralyse his power of accommodation—his ciliary muscle—by the instillation of a strong solution of atropine (gr. iv. to the ounce of water). After this has acted for a couple of hours we examine the patient again. He cannot now read No. 20 without a glass, or even with convex 20; but now requires convex 10 for reading No. 19 fluently. The real amount of hypermetropia therefore $= \frac{1}{10}$. He has, however, been so accustomed to strain his powers of accommodation that he could not relax it completely, even when there was no occasion for accommodating at all, when we corrected the malconstruction of the eye by means of a convex-glass.

What spectacles are we to give him?

If we were to prescribe convex 10 they would be found too strong for distant objects, or even for reading. He could not all at once relax his accommodation, so as to be able to use the glasses, which really neutralise his hypermetropia, and which must ultimately be used if we wish to free him permanently from the annoyances of his affection. We must, therefore, gradually accustom his eyes to stronger and stronger glasses, until convex 10 be reached. Let us begin with convex 18 or 20. He is to wear them both for reading, writing, and distant objects. Never, indeed, laying these spectacles aside when he is using his eyes. In the course of a few weeks we give him convex 16, then 14, 12, and, at last, after the lapse of a few months, he can wear No. 10 for reading and for distance.

When the degree of hypermetropia is great, or when presbyopia co-exists, two sets of spectacles will be required, a strong pair for reading, writing, etc., a weaker pair for distant objects.

16, Savile-row, W.

(To be continued.)

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. X.

In my last paper I entered upon the consideration of Scabies, endeavouring to sketch out the history of the discovery of the insect—its habits, its general features, and the mode of its development. I come now to a point of some importance in a clinical point of view—namely, the *Symptoms*. The symptomatology of scabies has been very imperfectly given in most English works, and is calculated to mislead the Practitioner in arriving at a diagnosis. What is more common than the description of the disease as a vesicular eruption, when it is well known that vesicles are not met with in every case? and, what is more, that vesicular are not even the most common forms of eruption? Thus, from the statistics of Hardy, who has charge of the whole of the patients of the St. Louis Hospital who are affected with scabies, papular, that is, pruriginous, eruptions are met with in the proportion of 99 times in 100 cases; while vesicles are present 90 times, at the most, in a like number; and it must be evident to every one who has carefully studied the disease that these statistics are correct. We cannot be too cautious in our investigation of what are apparently vesicles. I have very frequently seen papules, slightly translucent on their summits, mistaken for them even by authorities on skin disease; and I well remember having lately seen one of the most distinguished dermatologists of the day, who has written one of the largest and best works on skin diseases, mistake small cauliflower excrescences of the glans penis for herpes præputialis, the vesicles in this case being, as he said, perfectly typical, while the use of a magnifying glass would at once have prevented the error. When, after contact with a person affected with scabies, the itch-insect reaches the skin of the individual so exposed, it burrows in the epidermis, and produces irritation. This irritation gives rise to the formation of some papules or vesicles, and also induces the patient to scratch himself, and the scratching is the cause of the appearance of eruptions, the character and situation of which alone often lead us to a correct diagnosis. The severity of the symptoms depends partly on the length of time that the person has been affected—that is to say, upon the number of acari which are committing their ravages upon him, and partly on the degree of sensibility of the cutaneous envelope. There are persons who are little annoyed by the insect, and others, on the contrary, who are in perfect agonies on account of it.

The acarus may flourish on any part of the skin, and it has been seen even on the face and head, although this is denied by many English authors. The hair does not deter it, for we see that the *same* insect attacks sheep and other animals which are abundantly supplied with wool or hair. It has, however, seats of predilection—those parts, namely, where the skin is delicate and easily penetrated,—viz., the fingers, especially the inner surfaces, and the folds of skin passing from one finger to the other. The wrists and palms of the hands are also commonly affected. Next to these parts the penis is most frequently attacked in the male and the nipple in the female. It probably attacks very frequently the genital organs of the female also, but from motives of delicacy these parts have not been much examined. The hips, the feet, the umbilicus, and the axillæ are also often attacked.

The canals (cuniculi) which the female acari burrow have generally a serpentine shape, and are usually from half a line to 3 lines long. Hebra, however, has seen them three or four inches in length, and he mentions that they sometimes completely surround the wrist in the form of a bracelet(a). I have never had the opportunity of seeing them so long as this, but my friend Dr. Reid had a case of the kind a few weeks ago. These canals have generally a whitish dotted appearance, the dots corresponding to the eggs in the canals, and not to openings, as some have supposed, and at the extremity of each canal is a little whitish elevation, which corresponds to the female acarus itself. It is useful to clean the skin of the parts before endeavouring to detect the cuniculi. After the death of the mother insect, the epidermis covering the canal gives way, and there is left merely a depression bounded on each side by a ragged edge of epidermis, and as these edges become dirty the remains of the cuniculus appears in the form of a dirty ragged line.

The irritation of the insect often produces, as before stated, the eruption of a few papules or vesicles *in the vicinity*. In the vesicles a young acarus is sometimes detected, and it is in these, according to Hebra, that it throws off its coat, and appears as a full grown acarus with eight legs.

Soon after the invasion of the insects, the person affected begins to complain of itching. This, at first slight, gradually increases in severity. It is sometimes almost entirely absent during the day, but becomes quite intolerable at night when the patient becomes warm in bed. This augmentation of itching at night, which is such a characteristic symptom, is explained by some on the supposition that the insect, remaining dormant during the day, commences operations at night. It is quite a mistake, however, that the female escapes from its canal at night, and creeps about upon the skin; for, as previously stated, once it has entered its canal, it can never return. The itching *may* be caused by the male acari, or by the larvæ running about, or by the impregnated female burrowing further into the epidermis.

The itching sensation is not confined to the parts where the

(a) *Allgemeine Weiner Medizinische Zeitung*, August 28, 1860, p. 281.

acari are deposited—there being a general feeling of itchiness all over the body. Some say that this is owing to the excrement of the insect being absorbed and circulating with the blood, but such an absurd hypothesis is not tenable. Devergie seems to coincide in the opinion of Bourguignon, that the acarus probably contains a kind of venom which, being thrown out, mingles with the circulation and gives rise to itching and eruptions on parts of the body where there are no acari. He, however, admits that the attempts at inoculation with "powdered acari,"(b) have not succeeded, and it seems to me that such ingenious and groundless theories are quite unnecessary, for we know that itching at one part of the skin—in cutaneous affections in general, is very apt to give rise to general itching, being manifestly due to a reflex sensation.

The itching causes the patient to scratch himself, and it is the scratching which produces those eruptions which are the most evident marks of the disease. It is of use to attend to the *character* and *situation* of these eruptions, as by this alone we can often diagnose the disease. As before mentioned, papular or pruriginous eruptions are the most common. The prurigo is met with principally on the *forearms, lower part of the abdomen, and upper and inner parts of the thighs*, there being, indeed few cases of scabies of long standing, in which these parts are not so affected more or less.

Vesicular are next in frequency to papular eruptions. The vesicles are met with on or about the fingers and on the nipples of females, and when vesicles are there detected, scabies should always be suspected.

Large (ecthymatous) pustules are often met with in children whose skins are delicate, and especially on the hands, feet, and hips. Ecthyma, limited to these parts, is almost pathognomonic of scabies, and indeed, in all cases of ecthyma, the probability of the acarus being the cause should be kept in view. Nurses, affected with scabies of the hands, and carrying infants in their arms, are very apt to communicate it to them, and this is the probable reason why ecthyma is so common on the hips of infants affected with the itch (c).

The above are the most common eruptions produced by the scratching, but, in addition to these, a latent diathesis is very apt to be called forth by the irritation, as, for example, an eczema, an impetigo, or a lichen. There are, therefore, two sets of eruptions in scabies—those produced by the irritation of the parasite alone, and which are scanty and ill-defined, and those produced by the scratching, which are in proportion to the length of time the disease has existed, and to the sensibility of the cutaneous envelope. These latter, when well defined, are highly characteristic.

Such are the symptoms of scabies as usually met with in this country, but there is a variety of the disease, which is rarely, if ever, seen in England, and which is named Scabies Norvegica, (Norwegian Scabies,) Borkenkrätze, Scabies crustosa, Scabies pecorina.

This variety is not, however, limited to Norway, but has been met with over the greater part of the continent of Europe. It is rare, and only thirteen cases of it have been recorded. It is much more serious than the ordinary affection, of which it is merely an exaggeration, or advanced stage, being due to the presence of the same insect in persons who are excessively filthy, and who have neglected to apply for treatment. Of the cases recorded, two died—one of pneumonia, the other of hyperæmia of the brain, brought on, no doubt, indirectly by the disease.

A very interesting case of this kind is related by Bergh, of Copenhagen (d). In this case, when the affection was fully developed, the greater portion of the skin of the body was thickened, the natural furrows increased in depth, the pigmentary deposit greatly augmented, the colour in some parts resembling that of the skin of a Mulatto, and a fine white desquamation covered the surface. Here and there papules were seen, some with dots of coagulated blood, others with whitish crusts on their summits. Vesicles also and pustules were detected. In the crusts portions of acari and their excrement and eggs were found. The scalp was almost covered by a large crust, from $4\frac{1}{2}$ to $1\frac{1}{2}$ millimètres thick, which adhered firmly, was of the consistence of the bark of a tree, but harder on the upper than on the under surface. In colour it was principally white, but here and there yellow, or coloured with blood. Numerous furrows were detected on its surface, and it was studded with fine openings for the hairs, which were healthy but glued together. The under surface was uneven and prominences projected into depressions in the scalp. The scalp was much reddened, and exuded a clear, thin fluid on the under surface, and in the furrows of the upper surface of the crusts multitudes of acari were seen.

The subject of this complaint was sixty years of age, and had twice been cured of scabies. Two years previously he slept in a dirty bed, after which the affection commenced. He was frequently treated, but the head, which was the focus of the disease, not being touched, the treatment was ineffectual.

He complained of intolerable itching, increased by motion or warmth—so great an effect, indeed, had warmth upon him, that, even in the coldest winter night, he lay covered with a thin sheet only, and even then he had frequently to leave his bed. In order to be able to scratch himself better, he was in the habit of sleeping without a shirt and when he went out of doors he avoided the sun sedulously for it increased the irritation. During the greater portion of the time he was in the Hospital, he sat upright in bed rubbing and scratching his head and face, and indeed the whole body, neither the soles of the feet, the palms of the hands, nor even the glans penis being spared. When asked to desist scratching for a minute, it was with the greatest difficulty that he was able to overcome the all but irresistible desire, and when he did desist, so great was the effort, that he was immediately seized with cold and shivering fits.

On examining the crusts, epidermic cells, mingled with molecular matter, mostly fatty, and here and there mingled with and coloured by blood, were seen, but the crusts were principally composed of the acarus, its excrement, eggs, and egg-shells. (The accompanying wood cut—see Fig. 19—is

Fig. 19.

Fig. 19.—Crust from a case of the so-called Scabies Norvegica; *a a a*, eggs of the acarus in various stages of development; *b b*, egg-shells; *c c*, fragments of acari; *d*, female acarus; *e*, larva. The little oval or irregularly-shaped masses are supposed to be the excrement.

(b) "Acarus broyés,"—"Traité Pratique des Maladies de la Peau." Ed. II., p. 564.

(c) "Leçons sur les Maladies de la Peau." Par le Docteur Hardy. Deuxième Partie. P. 191. 1859.

(d) "Archiv. für Pathologische Anatomie und Physiologie, und für Kilnische Medicine herausgegeben." Von R. Virchow, bd. xix. Hft. 1 u 2 p. I.

that of a crust from a case of this kind, which occurred in Würzburg.) A piece of the most superficial dense part of the crust, less than half a line square, contained 2 female, 8 six-legged young, and 21 pieces of acari, 6 eggs, 53 egg-shells, and about 1030 pieces of excrement. "In the deepest and softest parts of the crusts, amongst the skeletons of deceased generations . . . partly in holes and passages, partly between particles of the crust, partly also on their free surface masses of living acari wallowed and tumbled about." Who can conceive of a more frightful malady than that of being covered with millions of insects crawling over the skin, and deriving their nourishment at its expense, producing deformities which are loathsome to look at, itching terrible to bear, and tending to organic disease which is dangerous to life? Such is one of the awful penalties which poor creatures pay for long-continued filthiness and self-neglect.

Causes.—It is only in recent times that the itch-insect has come to be regarded as the sole exciting cause of scabies. Devergie believes in the spontaneous development of this disease. "And how can it be otherwise," says he. "The first person who was attacked by scabies could not have got it by transmission, and if the itch was once developed spontaneously, can it not do so twice, three times, a hundred times," etc. (e). But Devergie begs the question, for the first person who had scabies must have got it by transmission of the itch insect, for the transmission of the acarus is not necessarily from man to man.

Scabies is met with almost exclusively amongst the lower classes. Contact for a moment with one affected is not sufficient to give rise to the disease in the person so exposed. Some time is usually necessary. Thus it is oftenest caught by sleeping with, or in the bed of an affected individual or by using his clothes, and nurses with scabies on the hand are apt to communicate it to the hips of infants, as their hands are in prolonged contact with these parts in carrying them. It is much more frequent in males than in females, and in winter that in summer. According to Hardy's statistics, it occurs eighty times in winter to ten times in summer, and this is owing to the lower classes sleeping much more together in cold weather. In this country scabies usually commences on the hand and from it extends to other parts; in France, according to Hardy, it oftenest commences on the penis, and from thence is transmitted to the hands by the scratching.

The diagnosis of scabies should in general be quite simple. When a person comes to us with pruriginous eruptions on the belly, inner parts of the thighs, and front of forearms—a well-marked eruption of ecthyma on the hands, and complains of itching becoming intolerable at night, we can say to him, without further examination, that he is affected with scabies. I had occasion the other day to see a boy who had a pruriginous eruption of this kind, and round red spots on the hands which I recognised as the remains of ecthymatous pustules. He told me that he was troubled with itching at night, and it was quite easy, without further examination or questioning, to diagnose the case to be one of scabies modified by treatment. In the female, the appearance of vesicles, or papules, or excoriations, or eczematous eruptions on the nipples, are very characteristic as confirmatory of scabies, and papules or pustules in the penis of the male. Ecthyma on the hips of an infant is always a suspicious circumstance, and the state of health of the nurse should at once be investigated.

We can, then, from the eruptions produced by the scratching alone, diagnose scabies at once, when these are well marked. But if there is any doubt, an examination will usually detect the furrows or cuniculi of the insect from which the female can be extracted. Even the remains of a cuniculus, such as I have described (p. 81) is, to the accustomed eye, almost pathognomonic. It is best to look for the cuniculi on the hands, or, in the male, in the penis, where, when present, they are very easily detected.

Sometimes, when present only in small numbers, these canals cannot be found, and, from the short duration of the disease, secondary eruptions have not begun to be formed, and the only symptom is itching at night. In such cases, however, there will generally be some circumstance which leads us to suspect scabies, as, for instance, the patient's bed-companion, or play-fellow, being affected; for, in equivocal cases, inquiry should always be made with regard to the state of health of the friends of the patient.

In doubtful cases it will be well to treat the case for scabies, and the result will verify or disprove the diagnosis. But such treatment, to be of value diagnostically, must be efficiently, and not partially, carried out. The following, then, are the principal points to be attended to, and are mentioned in the order of their diagnostic value:—The detection of the cuniculus containing the insect, or the remains of these canals; ecthymatous pustules on the hands, or on the hips of infants; prurigo principally attacking the parts before mentioned; itching becoming intolerable on getting warm in bed; papules or vesicles on the hands, eruption on the penis of the male, or the nipple of the female.

Of course any kind of eruption may appear in a case of scabies, and in any part of the body; but those above mentioned are the most characteristic, and of the most constant occurrence in connexion with the acarus.

(To be continued.)

(e) "Traité Pratique des Maladies de la Peau." Par Alph. Devergie. Second Edition. P. 565.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

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SYPHILITIC AFFECTIONS OF THE NERVOUS SYSTEM.

CASES OF PARALYSIS ASSOCIATED WITH SYPHILIS.

The following four cases are grouped together as illustrating some forms of paralysis due to syphilis, although the cause in each, no doubt, was varied. In the first, in which all the limbs were paralysed, there may have been some general inflammation and thickening of the membranes of the spinal canal and at the base of the brain. Dr. John W. Ogle, in the last volume of the *Transactions* of the Medico-Chirurgical Society, records a case of "Recurrent Anæsthesia of almost the entire surface of the body, accompanied by partial loss of motor power in all the limbs, traceable to the effects upon the spinal nerves of effused products within the spinal canal." In this case the general condition was somewhat similar to that in the case we are about to record, in that nearly the whole body was paralysed, and very likely the pathological conditions are much the same; although the cause which gave rise to the deposit around the roots of the nerves—which we suppose also to exist in Dr. Barker's case—may have been different. In the case we are recording, there can be little doubt but that syphilis was the cause of the paralysis. Dr. Ogle, in reference to his case, writes:—"The adventitious material attached to, and in many places surrounding firmly, and as it were incorporated with, the roots of the nerves, was manifestly the remains of some exudative process which at some time or another had during life affected the spinal membranes. Whatever may have been the precise nature of this process, whether, that is to say, it was of a purely local nature and of a kind usually designated inflammation of the spinal membranes (the masses of deposit about the nerves, being, in fact, only part of some exudation, the rest, chiefly fluid, having been absorbed), or whether it was of a more unlimited nature, an expression or manifestation of some general cachectic state such as will induce, as we know, fibrinous effusion simultaneously into various organs and upon various free surfaces, it was equally interesting and important to find that the chief results of the exudative processes had been aggregated around the roots of the nerve." In Dr. Ogle's case there was numbness of the cheeks and nose, due to implication of parts of the fifth nerve. The third and fourth nerves escaped.

although it appeared after death that these nerves were involved in the effusion. In the following case the sixth pair of nerves were involved and the patient had great difficulty in speaking, but it is reported that there was no paralysis of the face. In this Journal for October 28, 1858, are recorded two cases of paralysis of the third and fifth nerves, occurring in persons the subjects of well-marked tertiary syphilis. After death neuromata were found in the trunks of the nerves mentioned. In these cases the origin of the neuromata may have been some inflammation of the membranes, parts of the effusion being subsequently absorbed, and the rest of the exudation around or in the substance of the nerve degenerated into neuromata. Around the anterior roots of one of the spinal nerves in Dr. Ogle's case, the deposit was a pink-stained mass, which, except for its colour, had much the appearance of a neuroma or gangliform enlargement." As to the syphilitic history of the following case, there were remains of iritis and keratitis. The malformation of the teeth, to which we alluded in our previous report. The history of his mother's pregnancies, eleven children, and six deaths soon after birth, is also suspicious. Although she denied that she had had syphilis, there can be no doubt as to this point.

Case 1.—*Paralysis of the Four Limbs—Notched Teeth and Remains of Kerato-iritis*—W. A., aged 18, a shop-boy, was admitted into St. Thomas's Hospital, under the care of Dr. Barker, on October 3, 1860. He is an intelligent, sharp-looking boy; looks much younger than he is; has the appearance of a boy of 14 or 15 years of age. His history is, that one month ago he first found numbness in the tips of the fingers; this gradually went up the arms: about the same time he had numbness in the toes of both feet; this extended up the legs, and "he could not feel with his hands nor with his feet." For a week or ten days before the numbness he had severe headache, "which kept him awake at night." His sight had always been dim as long as he can remember, but has been worse the last two or three years. He has been deaf for some years. There are remains of kerato-iritis. Both pupils are irregular. His teeth present in a very characteristic form the appearances produced by hereditary syphilitic taint. The condition of the patient is, inability to stand, or to sit up in bed; he cannot move the arms or the fingers, but can slightly move the legs; there is no sensation in the fingers nor in the forearms; sensation is slight in the lower extremities; the intercostal muscles do not act (?). There is no paralysis of the face, but there is impaired power in everting the eyes, due, no doubt, to implication of the sixth pair of nerves. No tenderness in the spine; has no power over the bowels nor the bladder; passes everything in bed. Has involuntary startings of the legs. He seems to be intelligent. Does not complain of any pain; the head is cool; the tongue is coated—red at edges. Pulse 72.

Dr. Barker ordered liq. hydrarg. bichlor. ʒj. ter die, and the spine to be painted with the liq. vesicat.

October 18.—Sensibility has increased in the legs; he can move the legs more than he could; no sensibility in the arms; no wasting of the extremities. His mother was seen to-day. She has had eleven children; six of these were born dead, or died soon after birth; they had no eruption on them. She says that she never had syphilis, nor does she think her husband had. He is dead.

31st.—More use in the legs; no power over the sphincters. Says his sight is clearer than it has been for some months. No pain in the head.

November 5.—Has sensibility in the fingers and hand, but cannot move the hands nor the arms.

12th.—Can move the arms from the body; more use in the legs; no power over the sphincters.

28th.—Can move the arms freely—this has come very gradually; sensibility in both legs and arms almost perfect; sphincters the same.

December 15.—Condition much the same as on last report. Bowels regular; appetite good; sleeps well; sight has improved, and is not so deaf.

January 1, 1861.—No power over the bowels nor the bladder, but makes his wants known to the nurse. (This is an improvement.)

February 10.—Has been gradually improving; can sit up in bed, and can move his fingers, hands, arms, and legs in any direction; sensation is perfect; can see much more distinctly; is very slightly deaf. He tried to stand yesterday; this caused great pain in the knees. Sphincters about the same, but quite conscious of the passage of fæces and of urine.

He was discharged, much improved.

The particulars of this case were supplied by Mr. Swallow.

Case 2.—*Infantile Syphilis—Pain in the Right Side of the Head—Spasm of the Muscles Supplied by the Portio Dura on the Right Side—Paraplegia—Death.*—Henry G., aged 4 months, was admitted, under Mr. Hutchinson's care at the Metropolitan Free Hospital, on January 29, for an abscess in the arm, and congenital syphilis. Iodide of potassium was given, and the abscess was opened. It had been probably a cellular node, which had suppurated. On his next visit the site of the abscess was occupied by a rounded and defined lump, over which the skin was smooth and purple. There was another, but not so much reddened, and not at all tender, in the cellular tissue over the right buttock. There was no doubt, from the mother's history, that the child was suffering from syphilis, and the general appearance of the child confirmed that idea. The mother had had six children, of whom three were dead. She had been, during her last pregnancy, under Dr. Jones's care at this Hospital for syphilitic phagedænic ulceration of the throat, and had been cured by iodide of potassium, and local mercurial fumigation. She was subject to lepra and chronic psoriasis, both of which latter, however, she had had all her life. She stated that her child had had two convulsive fits since her first attendance. On her next visit, February 15, she said that he appeared to have great pain on the right of his head, below the ear, and that he kept putting his hand there. She said also that the right side of his mouth often "worked," and that he then became insensible.

February 22.—The face on the right side was now seen during the visit to be spasmodically affected, the right eye being closed, and the mouth drawn (by spasm) to the *right*, and continually twitching. The left eye was open, and that side of the face normal, except that it was drawn somewhat by the over action of the other side. He did not appear to be at all insensible. He was brought for the last time on February 26. He had then lost power over his bladder and legs, and was apparently suffering much pain. His mother says that on the 23rd his water began to dribble from him, and that he never passed any water afterwards, except in that way. His bladder was distended. The urine was drawn off by a catheter. There were no signs of stricture. Both legs were severely pinched by the nails. He did not seem to feel at all on the left side, and this leg was quite without power of motion. On the right side the feeling was very slight, and he only moved it to a very trifling extent when severely pinched. He could move the arm and upper part of the body quite well.

She did not bring the child to the Hospital again, but it was ascertained that the child died on March 3. She said that its belly and legs had swollen very much, and that its arms "had dwindled to nothing." For some days before death "he became quite stiff." For several days "he was insensible," and the day before his death he had a "screaming fit."

In the above case the spasmodic affection of the portio dura was the first symptom. It was impossible to ascertain if the child was deaf. There was, however, no discharge from the ear.

It is well known that in cases of congenital, as well as in acquired syphilis, deposits are found in internal organs. Testelin (see Sydenham Society's "Year-book," 1860) believes that the high mortality of suckling children affected with hereditary syphilis depends on specific disease of the liver, characterised by the deposit of fibro-plastic elements in the parenchyma. The paraplegia in the case we are recording was probably due, as in *Case* 3, to deposit of this material in the spinal canal, compressing the cord and affecting the roots of the nerves. In *Case* 3 it will be seen that deposits were found in the liver also.

Case 3.—*History of Syphilis—Cystitis—Pyelitis—Paraplegia—Death—Tumour in the Spinal Canal.*—Mary W., aged 53, was admitted into Guy's Hospital, under the care of Dr. Gull, on June 15, 1859. She was taken in on account of a feeling of numbness and loss of sensation over the right hip. Along the crest of the ilium she stated that she had no feeling. Without being questioned on the subject, she constantly complained of having her body and mind ruined by

syphilis given to her by her husband, but she had no outward symptoms of this. This feeling of numbness continued in spite of all remedies, but it was not evident how deeply the nerve was affected until she began to have weakness of the limb and subsequently of the other, when a total paraplegia ensued with all the consequences of paralysis of the bladder, purulent urine, etc. She died on September 3.

Autopsy.—(From Dr. Wilks' records.)—The brain was not examined. In the lumbar region of the spinal cord on the right side was a hard deposit, about three quarters of an inch in length. This involved the posterior roots of the nerves, was closely adherent to them and to the spinal cord. It was not defined as a tumour, but formed an irregular long mass altogether about the size of a nut. When incised it was seen to be composed of an opaque, yellow, amorphous substance, in fact, of dead or degenerated lymph, and resembling the same in the liver. Dr. Wilks believed this to resemble in every respect the material which is called syphilitic. The right and left pleuræ were healthy. There were one or two cretaceous deposits in the glands. The lungs contained a few hard masses resembling those in the liver. The liver contained two or three nodules of tough yellowish amorphous substance—one on the surface causing a slight cicatrific appearance, and another large one within (syphilitic?). Urinary organs:—Acute pyelitis. Kidneys filled with a brown, fetid, purulent urine, and mucous membrane covered with decomposing lymph. The bladder also was filled with brown, fetid, purulent fluid, and mucous membrane sloughing.

In the *British Medical Journal* for March 3, 1860, Dr. James Russell related three cases of syphilitic paralysis in a paper, entitled "Cases of Syphilitic Disease of the Cranium." The first was a case of paralysis of the third nerve, the second of the fifth. We shall again refer to these cases when detailing other cases of paralysis of some of the cranial nerves. The third case of Dr. Russell's series is as follows:—

Case 4.—Syphilis — Hemicrania — Cure by Iodide of Potassium— Subsequent Recurrence—Ptosis and Numbness of Left Cheek—Convulsions—Hemiplegia—Persistent Paralysis with Rigidity—Great Loss of Mental Power.—A gentleman, who had had sundry venereal affections in 1837 and 1838, for which he was treated with mercury. In the winter of 1838 he had hemicrania, which was cured by iodide of potassium and sarsaparilla. The attacks of pain returned in 1842, and at the close of the year the attack was accompanied with confusion of thought; left ptosis and numbness of the left cheek. Early in 1843 he had two attacks in one day, of inability to find his words, from which he fell into a state of complete apoplexy, with general convulsions. In the following June his power of recollecting recent events was found to be weakened; his mental energy was diminished, and with these symptoms the pain was also present and continued; in September he was suddenly seized with hemiplegia of the left side, accompanied by numbness and spasmodic action in the arm. This attack speedily subsided; the arm, however, remaining partially paralytic and rigid ever since, and his intellect enfeebled. Attacks of pain continued to recur several times in a year, commencing in the right parietal and frontal regions, and increasing in intensity. . . . In 1847 his mind recovered itself to a certain extent.

In this case there was probably some disease of the bone and dura mater, causing irritation and pressure in the region of the brain, on the side opposite to the hemiplegia. It is a case similar in many respects to the case recorded as one of epilepsy, or rather epileptiform convulsions, in our Series (Case 2.)

THE POPLAR HOSPITAL.

EXTENSIVE ECCHYMOSIS FOLLOWING WOUND OF THE CHEEK.

The following case, to which Mr. Brownfield, the Resident Surgeon, directed our attention at a recent visit to the Poplar Hospital, is curious as showing extensive ecchymosis from a small and limited wound. A man, aged 72, was admitted on February 9 into the Poplar Hospital, under the care of Dr. Barr, for fracture of the angle of the lower jaw on the left side. The injury was caused by a cask falling against the jaw. Soon afterwards the ecchymotic swellings appeared about the jaw, and spread in irregular patches under the skin of the neck and on to the chest, and also upwards on the cheeks and to the opposite lower eyelid. The mucous membrane of the hard and soft palate was also very much distended. The effusion was about an hour in arriving at these limits. The swellings have since gradually subsided, leaving irregular reddened patchy stains.

ST. THOMAS'S HOSPITAL.

SUBACUTE LARYNGITIS—TRACHEOTOMY.

(Under the care of Dr. PEACOCK.)

C. C., aged 44, a stonemason, was admitted into St. Thomas's Hospital on February 13, 1861, under the care of Dr. Peacock. He stated that about four weeks before, when following his usual occupation in the Regent's-park, he took cold, and suffered from difficulty of breathing and cough, and had been gradually getting worse since, till four days before his admission, when he was taken suddenly very seriously ill, with the usual symptoms of laryngitis. It subsequently, however, appeared that he had had a cough and expectoration since the cold weather in the autumn, and had been losing flesh and strength. He stated that his family had none of them had any symptoms of consumption, and that he had never had any venereal affection.

The following notes were taken on the 14th:—He is breathing with great difficulty, and is generally compelled to sit upright in bed. His respirations are 16 to 18 in the minute. The inspiration is very prolonged, and the expiration short, and the interval also very long. The inspiration is attended by a loud stridulous sound, while the expiration is almost inaudible, and the difficulty of breathing is much greater when he is in the recumbent position. The chest is small and contracted, and especially fallen in under the clavicles, and the resonance on percussion is much impaired in all parts. There is very little movement of the chest with the respiratory acts, and the respiration is almost entirely abdominal. He complains of pain in swallowing and speaking; but his voice, though somewhat hoarse, is not husky or deficient in power. There is no fulness of the throat, and he does not complain of any tenderness on pressure at the sides of the larynx, and his face is not flushed, but pallid and shrunken. He has not much cough, but expectorates a considerable quantity of black pellity sputum, containing some large air-bells. The pulse is 92, somewhat large but compressible. The cardiac dulness is not increased in extent—the sounds are flat, but without murmur. There is some redness, but no material swelling of the fauces. The epiglottis cannot be seen on looking into the throat; but when the finger is introduced the epiglottis is felt to be closely applied over the surface of the larynx, and its sides are drawn together, and the larynx so closely applied to the posterior wall of the pharynx, that the finger cannot be passed between them.

After his admission he had been placed in the bath, and had taken an emetic and dose of castor-oil, and he had since had two grains of calomel, and a quarter of a grain of the potassio-tartrate of antimony every four hours. He had not, however, obtained any relief. A blister was applied behind the neck; he was directed to take chloric ether, and tincture of hyoscyamus, and to inhale the vapour of warm water. After a further interval of seven hours, as the difficulty of breathing was no less and he was becoming more prostrated, it was determined that tracheotomy should be had recourse to, and the operation was performed by Mr. Le Gros Clark, and great relief was immediately obtained.

18th.—When seen by Dr. Peacock, on the morning of the 15th, he was very much improved in appearance, his pulse was quiet and of better volume, and the air entered much more freely into the chest, so that the resonance on percussion was everywhere much clearer, and vesicular breathing could be heard. Since that time he has continued to improve. He took his dinner yesterday with an appetite, and to-day expresses himself as feeling quite well. Expression of countenance natural, face less pallid; pulse 80, somewhat feeble; skin warm and moist; respiration 16 in the minute; inspiration and expiration full and prolonged; chest fairly resonant on percussion on both sides, and less fallen in under the clavicles, but the movement is still less than it should be, and the respiration is chiefly abdominal. The vesicular murmur

cannot be heard from the sound in the tube. The larynx is still very much drawn down, but the epiglottis is not contracted, so that the finger can be passed behind it. Its edge is rough, but the posterior surface quite smooth. He speaks with a much clearer voice, and can breathe for a short time through the natural passage when the tube is blocked up.

25th.—Expression of countenance quite comfortable. Pulse 80, quiet, of good volume, and moderately firm. He sleeps well, takes his food with appetite; it agrees well, and the bowels are regularly acted upon. On the 22nd the tube was removed, and was found firmly stopped with secretion; a much smaller one was introduced, and the cleaner has not since been removed, yet he breathes quite tranquilly by the nostrils. Respiration is more thoracic than before, and fuller. The resonance on percussion is natural, but the respiratory murmur is somewhat inaudible, being masked by the sound in the trachea. The cardiac dulness on percussion is limited in extent; the heart's sounds are flat, but without murmur; the interval between the pulse and beat of the heart is very slight, the radial pulses are equal in force and synchronous. To have the quinine and iron mixture twice daily. It was thought better to retain the tube for a short time longer, for fear of any return of the dyspnœa, if the aperture were allowed to close. To be allowed to leave his bed.

The tube was finally removed on March 12.

March 14.—The aperture is now nearly healed; he has been entirely free from difficulty of breathing since the removal of the tube, and speaks with a sufficiently loud voice, though he is still somewhat hoarse. He has no cough, and very little expectoration. His appetite and digestion are good. His pulse quiet, and he is gaining flesh and strength. From this time, and except that he had some slight stitches in the side from cold, and an occasional laryngeal cough, he continued steadily to recover, and was discharged cured on April 4.

KING'S COLLEGE HOSPITAL.

FURTHER REPORT ON A CASE OF LIGATURE OF THE CAROTID FOR PULSATING TUMOUR IN THE ORBIT.

(Under the care of Mr. BOWMAN.)

In our Hospital Reports for August 6, 1860, we gave the details of a case of ligature of the carotid, by Mr. Bowman, for pulsating tumour in the right orbit. The patient was a woman, aged 41, admitted on April 30, 1860. The symptoms came on suddenly, as is usual in these cases. There was much pain, and considerable protrusion of the eyeball, and pulsation could be felt with the finger placed over the eye. The external rectus muscle was paralysed, so that the eye could not be everted. There was, however, no double vision, although the sight of the right eye was not impaired. There was a decided sharp bruit; and this and the pain, but not the protrusion, were removed by compressing the corresponding carotid artery. Digital compression of the carotid artery was first tried, but, in spite of it, the protrusion increased, giddiness came on, and symptoms of cerebral excitement. Mr. Bowman, therefore, on June 16, 1861, ligatured the common carotid. The bruit ceased, and the eye somewhat receded. The bruit returned, and was somewhat audible for fourteen days, when it quite disappeared. On July 23 a very faint bruit was heard, but the other local symptoms were arrested.

In the "Royal London Ophthalmic Hospital Reports," vol. iii., No. 2, New Series, p. 235, is a report of the case by Mr. Francis Mason, which brings it down to June, 1861, one year from the time of ligature of the artery. The following, supplementary to our own report, is an abstract of Mr. Mason's account:—

Up to August 3 the patient was doing well; but on the morning of that day, forty-five days after the operation, there was suddenly, at 9 a.m., arterial hæmorrhage to the extent of about two ounces. It was arrested by pressure, but recurred again to a trifling extent in the afternoon, and again in the evening. The eye had become much more prominent since the morning; she was distressed by the noise in her head, and a bruit could be distinctly heard by the stethoscope. Up to the 19th she improved, both as regards the eye and generally; but on the 19th and 20th the eye was more prominent, and the parts about it œdematous.

August 21.—About 11 p.m. last night she was almost pulseless, and her extremities were cold. She was supplied with brandy, and in about half-an-hour she rallied, and slept at intervals for about ten minutes through the night. Mr. Bowman ordered six leeches to be applied round the eye on account of the pain.

Mr. Mason reports that on the next day she suffered much less pain in the region of the eye, but the side of the face was still very much swollen. She continued gradually improving.

"September 18.—For about a week some small nodular swellings have become perceptible to the touch below the supra-orbital ridge, projecting near the upper wall of the orbit. There are three or four of these. They are elastic, and pulsate very decidedly when touched; they seem also distinct from one another, or if they have a common connection it is in the depth of the orbit. The innermost one is above the tendo oculi. It is like a pea, very distinct from the rest, and pulsates most. It is doubtful whether there be not some swellings within the lower wall of the orbit. The eyeball is hard and more prominent; pupil dilated; no sight; no glandular enlargement in the neck. She is in constant pain, and sleeps little, even with morphia. The lids are less tense. The pulsation ceases on compressing the left carotid. A faint soft bruit is heard over the orbit. Tongue clean. She is much weaker."

"October 2.—Has a good deal of pain at times in the eye, but patient altogether improving slowly. 25th.—Has been much the same since last report, but she is much stronger and better in health; eats well, but cannot sleep without the morphia. The small pulsating nodules below the brow are just as before. Ordered to be discharged and to go into the country."

Mr. Mason having written to the patient to inquire her present state of health, received the following reply:—"June 7, 1861. I feel great pleasure in informing you that I have greatly improved since I left the Hospital, and I am happy to say that I am able to follow my occupation at home more than I ever expected I should be able to do. . . . I have quite lost the sight of my eye, but the swelling is gone down, and it is much smaller than it was when I left the Hospital."

GUY'S HOSPITAL.

CALCULUS VESICÆ—PURPURA—GLOSSITIS—PYÆMIA.

(Under the care of Mr. BRYANT.)

John B., aged 16, was admitted on April 29. He had suffered from symptoms of stone for eight years, and as these had lately become very severe, he sought advice. The boy begged for early relief, on account of his extreme sufferings, but Mr. Bryant thought it better to maintain rest in the horizontal position for a few days before operating. The day was fixed, but the evening previously he became covered with purpuric spots. This continued for some days, threatening death, but at length showed indications of improvement, when he was attacked with acute glossitis. This, however, caused only impeded respiration; in three days the swelling partially subsided, but the glands of the neck became immensely swollen, from which he died on May 21.

Autopsy.—The following is Dr. Wilks' account of the autopsy:—Body still covered with purpura, or rather the limbs. The neck was much swollen, and when examined found to be due to inflammatory serous infiltration. The glottis was very œdematous, and the adjacent mucous membrane was red, but there was no lymph on it. The tongue was enlarged, and on it were one or two sloughs. On cutting through this the muscle was found to be infiltrated with purulent matter, so that, in a very short period longer, there would have been two or three distinct abscesses. The lungs showed various masses of red and grey hepatization. Several portions of the latter were soft and exuding purulent matter. The surface of the heart was ecchymosed, not in the interior. The right kidney was wasted almost to a shell, but in the part which still remained suppuration existed.

The left kidney was much hypertrophied, and contained one or two large abscesses, and several smaller ones. Pelves inflamed. Ureters inflamed, and mucous membrane ecchymosed. The internal surface of the bladder was ecchymosed by the purpura, but was not much otherwise affected by the calculus. The latter was very large and lying crosswise in the bladder. Dr. Wilks adds that there being no history of scarlatina or other exanthem, we must consider the case as one of pyæmia commencing in the bladder and kidney, the purpura being merely a symptom.

THE ST. PANCRAS AND NORTHERN DISPENSARY.

STRANGULATED HERNIA IN A WOMAN AGED SEVENTY-TWO—OPERATION ON THE FOURTH DAY OF STRANGULATION — SAC OPENED — RAPID RECOVERY.

[Communicated by Mr. FRANCIS MASON.]

Jane H., aged 72, a widow, came under my notice as a patient at the St. Pancras and Northern Dispensary, on Thursday, March 7, 1861, suffering from symptoms of strangulated hernia. She stated that she had been the subject of a rupture in the right femoral region for about two years; had always worn a truss, which had not fitted her very accurately. It seems, that after lifting a heavy box on the previous Monday, she noticed she could not return the rupture as on all former occasions. The same evening violent vomiting came on, which greatly prostrated her, and she applied on Tuesday morning at an Hospital, where she was advised to become an in-patient—an offer which she positively refused. She therefore returned home, and went to bed, and the sickness having in some degree abated, she thought the urgent symptoms were passing off. On the following day, however, the same train of symptoms recurred with increased severity; and I was called to see her on Thursday morning.

On my visit I found her in bed, much prostrated, and vomiting feculent matter every quarter of an hour. Pulse 120, extremely feeble; tongue covered with a brown fur. The bowels had not been moved since the previous Monday morning, and then only a slight action had taken place. On examining the right femoral region, I found a hernia the size of a small orange, painful to the touch, the tenderness extending over the abdomen. She was suffering from a severe attack of bronchitis, and complained of great pain in the tumour whenever she coughed. I immediately tried the taxis, and resorted to the other methods lately revived for reducing hernia; but in vain. I determined to operate without delay. Chloroform having been administered, an incision was made on the inner side of the tumour; the sac opened, and the intestine, which was of a deep claret colour, returned without difficulty. The patient was ordered forty minims of the tincture of opium immediately after the operation.

She recovered without any bad symptoms, and was well on the 12th, and about her household duties.

Medical Times and Gazette.

SATURDAY, JULY 27.

STATISTICS OF PULMONARY DISEASE IN NORTH AMERICA.

THE vital statistics of the United States Army reveal some facts of considerable interest, as illustrating the influence of climate on the causation and development of certain pulmonary diseases. We have before us a most elaborate report, of 690 quarto pages, on the Sickness and Mortality in the United States Army, embracing a period of sixteen years, viz. from 1839 to 1855, prepared by Messrs. Lawson and Coolidge, Surgeons in the United States Army. In this Report the vital statistics of the army in peace are given separate from those in war, a plan which facilitates their comparison with the statistics of civil communities. It is likewise the more practically useful on account of its uniformity (as far as possible) with the Medical returns of our own army in our North American dependencies and elsewhere, prepared by our able statistician, Colonel Tulloch.

The statistics of pulmonary disease, scattered up and down through this ponderous volume, have been ably analysed, and turned to good practical account by the late Dr. Daniel Drake, of Cincinnati, in his great work on "The Principal Diseases of the Interior Valley of North America." From its bewildering chaos of figures he has deduced some interesting facts about the prevalence of pulmonary diseases in different parts of North America—facts which few would probably have time or inclination to eliminate for themselves. It is from his able analysis of the Report above-mentioned that the following observations have been compiled:—

Diseases of the lungs in North America, either tubercular or inflammatory, are more common than those of any other organ or group of organs. We will notice, first, the inflammatory affections.

For purposes of comparison, Drake selects, besides the Canadas, twenty-six military stations, scattered about the great valley of the Mississippi from the Lake region down to the Gulf of Mexico, and divides these into five groups, which he calls the "Upper" and "Lower Lake," the "Northern" and "Southern Inland," and the "Gulf" group. By a careful survey and contrast of the Medical statistics of these different groups, he illustrates very clearly certain relations between climate and the different forms of pulmonary phlegmasia. Before noticing these we should remind our readers of one important peculiarity in these military posts, viz. that, with the exception of those on the Gulf of Mexico, they are almost all cut off from oceanic influences—on the west by the great chain of the Rocky Mountains, running parallel to the Pacific coast; on the east by that of the Alleghany Mountains, running parallel to the Atlantic coast.

Beginning with the British military posts in Upper and Lower Canada, we gather—from statistics carried over a period of twenty years—the two following facts; first, that the mean prevalence of pulmonary diseases of *all* kinds was lower in this than in any other group of posts, even down to the Gulf of Mexico, being only 140 per 1000 mean annual strength; secondly, that in the pulmonary affections which did occur, the catarrhal greatly preponderated over all the other forms of them.

Next comes the group of posts on the shores of the Great Lakes. These are eight in number, six on Lakes Superior, Michigan, and Huron, called "Upper Lake" posts; two on Lake Ontario, called "Lower Lake" posts. The average of pulmonary phlegmasiæ in the former (Upper Lake) group is higher than that of the Canadas, but lower than that of any remaining group except the most Southern, *i.e.*, the Gulf posts; the mean aggregate (a) being 303, of which 264 are cases of catarrh, 12 of pneumonia, 27 of pleurisy. It is plain, therefore, that the presence of immense sheets of water, though possibly not preventive, at any rate is not productive of these complaints. Pneumonia is less prevalent here than at any group of posts further south. The Lake region, indeed, is more free from lung complaints than the regions to the east and west of it in the same latitude. The two posts on Lake Ontario suffer to a much greater extent from catarrh and pneumonia than the six on the other Lakes, the mean aggregate of pulmonary phlegmasiæ being 551, of

(a) Mean aggregate, *i. e.*, the proportion of cases per mean annual strength of 1000 men, in other words, when we say that such and such a number is the mean aggregate of pulmonary disease, we imply, not that it represents the actual number of cases that did occur at the post, but the number which would have occurred if the post had been just 1000 strong.

which 496 are cases of catarrh, 33 of pneumonia, 22 of pleurisy. This high ratio of the Lower Lake group, Drake accounts for by the fact that Ontario is the source, and right in the axis of the valley, of the river St. Lawrence, which reaches the Atlantic by a north-east course; and consequently the posts upon the shores of that Lake are peculiarly exposed to the north-east winds which carry up the valley the damp cold air of the sea about Newfoundland.

Travelling towards the south-west from the Lakes, we come to the Northern Inland group of posts, four in number, extending from lat. 45° to 39° N., and situated one in the valley of the Missouri, the other three in that of the Mississippi. Here the proportion of pulmonary to other diseases and to the number of men, is much greater than in any other group of posts, except the Lower Lake, the mean aggregate being 532, of which 480 are cases of catarrh, 38 of pleurisy, 14 of pneumonia. The mean of the whole, therefore, is almost twice as high as that of the Upper Lake group; the cause of the difference being the great increase in catarrh and pleurisy, the proportion of pneumonia remaining about the same.

Next comes the Southern Inland group of posts, six in number, situated also in the Mississippi valley directly south of the preceding group. Here the mean aggregate is 345, 253 being cases of catarrh, 31 of pneumonia, 61 of pleurisy. It will be observed that in the last group the catarrhal cases were to all others as 480 to 52; in the present they are as 253 to 92; so that catarrh diminishes as we go south, while pneumonia and pleurisy increase.

The Gulf posts, eight in number, extend along the coast of the Gulf of Mexico from the mouth of the Mississippi to the extreme point of Florida. The mean aggregate here is 277, 223 being cases of catarrh, 17 of pneumonia, 37 of pleurisy. The Gulf, therefore, seems to have a greater influence in reducing the ratio of the two latter diseases than it has in reducing the ratio of the former. Why the gradual decrease of catarrh is retarded when we come to the Gulf posts, is not easy to explain. "That it is not mere humidity," says Drake, "will appear on comparing the Gulf with the Upper Lake posts. We find that 1000 men on the shores of the Northern Lakes will afford but 41 cases of catarrh, and only 22 cases of all kinds of pulmonary disease more than the same number on the shores of the Gulf. In fact, while catarrh is a little *more* prevalent, other forms of lung disease are less so on the Upper Lakes than on the Gulf; which demonstrates that the vapour of fresh water does not tend to produce pulmonary disease, since the difference of temperature alone ought to give a greater number in the North than in the South."

The main results, therefore, which Drake deduces from the Army Returns, with regard to the influence of climate on the pulmonary phlegmasiæ are as follows:—

1. That in all the groups of posts of which he has analysed the returns, from the Canadas down to the Gulf of Mexico, some form or grade of catarrh or bronchitis is more frequent than all the other pulmonary affections taken together.

2. That of these groups the *most* liable to catarrh, and indeed to all kinds of pulmonary inflammations, is the Lower Lake group (*i. e.* the Ontario posts): then come, in the order of decreasing liability, the North Inland, South Inland, and Upper Lake; the *least* liable to these complaints being our own British possessions, the Canadas.

3. That, as a rule, the ratio of catarrhal affections decreases as we go southwards, while the ratio of pneumonia and pleurisy increases; in other words, that inflammations of the pulmonary mucous membrane are commoner at the Northern than the Southern posts, while inflammations of the pleural membrane and the lung-tissue itself are more common at the Southern than the Northern.

We have hitherto been considering the purely inflammatory affections of the lung. We will now mention some of the relations between climate and *phthisis*, which Drake has made out from a study of the Army Returns. These seem to us of great interest, inasmuch as they are irreconcileable with the long established opinion—both in the popular and professional mind—that a close connexion exists between phthisis and cold, variable, humid climates. Taking (1) the continental and insular possessions of the British in North America, statistics show that the annual mortality from phthisis among our white soldiers is 40 per 10,000 men in Canada, 46 in Nova Scotia, 59 in the Bermudas, and 63 in the West Indies. Taking (2) the maritime posts of the United States (on the Atlantic), we find—north of New York, a mean annual mortality from phthisis of 43. South of New York, as far as South Carolina, of 63. Taking (3) the inland posts of the United States; in those above St. Louis, *i. e.* lat. 38° N., the mean annual mortality is 35; in those below St. Louis, 62. Comparing (4) the extreme north and south of the States, we find at the Lake posts a mortality of only 19, at the Gulf posts of 68. In the Lake districts, therefore, the ratio of mortality from phthisis is the lowest of all. Now, all this proves pretty conclusively that, at any rate in the United States army, the mortality from phthisis is far greater in the warm Southern, than in the cold Northern latitudes. Drake says also that, as far as his observations extend, the military returns are not contradicted by the civil.

Does the same hold good in other parts of the globe? Take for instance the case of our own troops at home and those serving at Mediterranean stations. The mortality from phthisis among the former is 77 per 10,000 men; among the latter (Gibraltar, Malta and the Ionian Islands), 32 per 10,000. At first sight, therefore, the law of increased mortality in Southern climates does *not* hold, but according to Colonel Tulloch, the highest authority on these matters, the difference in the two returns is more apparent than real; inasmuch as it is the invariable practice to send to England all our Mediterranean soldiers who become permanently infirm. Thus great numbers die either on the voyage or after reaching home, and therefore do not appear in the Mediterranean returns. These returns consequently do not represent the full mortality from phthisis in those parts. Tulloch expresses the opinion in reference to Gibraltar, that if the number sent away to die could be included in the returns of deaths from that station, it would prove to be as much infested with phthisis as England itself.(a) As regards the whole number of soldiers *attacked* by phthisis, he shows that at our Mediterranean stations, the average ratio is just as great as that in England, while at Gibraltar it is even greater.

But granting that in the cases just examined, phthisis had a greater *mortality*, have we any proof that it is also equally or more apt to be *generated* in the south than in the north? For we must remember that, at the southern stations of which we have been speaking, the soldiers who died were not natives of those stations, but came from a more northern country, and, therefore, possibly brought the seeds of the disease with them. Drake, however, suspects that such powerful agencies as the heat and moisture of low latitudes, and the fevers which break down so many constitutions, cannot but be instrumental in generating a tubercular diathesis; and he instances the native black troops of the West Indies, who, neither themselves nor their ancestors ever resided in a high latitude, and yet present the highest known ratio of mortality from phthisis, viz. 88 per 10,000.

(a) On the prevalence of tubercular and other pulmonary diseases on the shores of the Mediterranean, and the questionable prudence of recommending them as a residence for phthisical patients, see some pertinent remarks by Dr. Rolleston, in his "Report on Smyrna," pp. 67—68. (London: 1856.)

The general conclusion from all that has been said is this: that a tubercular diathesis, so far from being peculiar to cold and variable climates, may originate in any latitude, from the high portions of the temperate zone down to the equator; and that there is fair reason for supposing that it is not generated more readily in the north than in the south. The practical rule which Drake deduces from this is, that *any one who has phthisis, or a predisposition to it, ought not to seek a warmer climate in winter, but a colder one in summer.*

It should be remembered that nearly all the calculations which we have quoted from Drake's work, are taken from the Medical Reports of the United States and our own army. They, therefore, serve very well to show the influence of different climates and localities on pulmonary diseases in one class of men. But at the same time, such statistics take no account of females, children, or aged persons, and in many other respects are too narrow and circumscribed to be available, save very roughly, for estimating the prevalence of these diseases among the people at large.

THE WEEK.

While the printers are preparing this Number for our readers, the British Medical Association is concluding a very pleasant meeting at Canterbury by after-dinner speeches. The Address of the New President, Dr. Lochee, on Tuesday, was considered by all present to be a great success. It was a very able and thoroughly satisfactory Address. In the evening some very stringent resolutions against professional intercourse with Homœopaths were passed almost unanimously. The precise words shall be given in our next Number. On Wednesday, after a public breakfast, Dr. Markham read the Address in Medicine, which was extremely well received. Papers on Ovarian Disease, by Mr. Spencer Wells; Excision of Joints, by Mr. Price; Special Hospitals, by Mr. Martin; and Cardiac Apnœa, by Dr. Richardson, followed. Mr. Martin's Paper was succeeded by a long and interesting discussion, but no resolution was brought before the Association. In the afternoon the Dean accompanied the members round the Cathedral, and became a most kind and instructive guide. The clergy vied with their Medical friends in entertaining the members, and many were the pleasant dinner parties in the old town. In the evening the Deanery was thrown open, and a selection of glees and songs by members of the choir made a very brilliant *soirée*, graced by many of the fair daughters of Kent, unusually pleasant. Little very important business was done, but there was a great deal of very agreeable gossip, and many a busy Doctor will hereafter recall his holiday at Canterbury as one of his most pleasant recollections.

A letter has been published by Mr. Fergusson in reference to the charges made against him of habitually entering into Professional intercourse with Homœopaths. He says:—

"The fault of which I was accused three years ago, was that I had travelled in company with a Homœopath to relieve a gentleman of retention of urine, when the regular Surgeon in attendance had failed; and I was further accused of holding consultations with Homœopaths. The former charge I admitted, and the latter I distinctly denied. In addition, I stated that 'I had no faith in Homœopathy,' and that 'I gave no encouragement to Homœopaths to consult me.' I added further that I never refused my Surgical services in any important case where they might be required, and would hold my conduct unjustifiable if any evil or fatal result ensued from negligence or refusal on my part. To all these views I hold as strongly now as I did at the time in question. I still do not consult with Homœopaths; I still have no faith in Homœopathy, and I still give no encouragement to Homœopaths to consult me. I never intended, and do not wish now, to have or leave room for any quibble on these points. I have been told that to meet a Homœopath in any way in a case is to consult with him, and that, therefore, my denial is worthless; that such meeting amounts to a consultation. With those who take this view I at once plead guilty. I am occasionally consulted by Homœopaths (as I know other Surgeons are), and, hearing their history of the case in clearer terms than from the patient or a friend, I give my surgical opinion; with this the interview ends. From first to last there is not a word about Homœopathy introduced; but should there be, I invariably let the patient know that I have no faith in such doctrine, and that I am giving my opinion solely as a Surgeon. I am not aware that I have met with any man who has stronger views, prepossessions, or objections against Homœopathy than I have. No Homœopath can say that I ever conceded to him one tittle on Homœopathic principles; and as a public teacher of thirty-five years' standing, I appeal to my numerous pupils with the utmost confidence that they will free me from the imputation of having ever encouraged such doctrines."

The "Chancery Lunatics" Bill, providing for the retirement of the two present, and the appointment of one other Inspector is, we hear, to be withdrawn for the present Session. As to Criminal Lunatics, the new Asylum for them at Broadmoor has been placed by the Home Secretary under a "Council of Supervision." Sir W. Hayter, Sir Hylton Jolliffe, Sir James Clark, Sir Joshua Jebb, and Dr. Hood compose this Council. The appointment of Sir James Clark and Dr. Hood will certainly be approved of by the Profession.

At the Somerset Assizes, Sarah Smith was indicted for the wilful murder of her infant child at Stoke Prior, on April 14 last.

The prisoner had formed an improper intimacy with a gamekeeper, and became pregnant. On April 14 last, on hearing moaning in the prisoner's room, one witness went in and found her very ill. He offered to get her a Doctor, but the mother declined, and on going up to her room afterwards, she told him "it was all over," and that she had had a miscarriage. In a day or two, Mr. Prosser, a Surgeon, made an examination, when having satisfied himself that she had been recently delivered, she at last admitted the fact, and produced the dead body of the child from a box in an inner room. Mr. Prosser deposed that the child was a full-grown, healthy male child, that it had been born alive, and had breathed, as he had proved by the usual tests. There were marks of violence on the throat, as by fingers and bruises, and he was of opinion that the cause of death was pressure on the throat. His opinion was that the injuries were inflicted when the mother was in a state of consciousness. His Lordship, being appealed to by Mr. Huddleston, expressed his opinion that there was not sufficient evidence to go to the jury on the capital charge of murder. Accordingly that charge was abandoned, and the prisoner was found guilty of concealment of birth. She was sentenced to four years' imprisonment.

Deeds of criminal violence appear to abound just now. A policeman at Middlesborough has attempted to poison his wife by strychnine, after having failed in an attempt by laudanum.

It appears that the prisoner, about three weeks ago, administered to his wife a quantity of laudanum, she having complained of being unwell, the prisoner at the time stating it was something he had purchased of a chemist to cure the pain. Last week he took her a powder, under the same representation, stating that it would do her good. From the manner and demeanour of the prisoner she was rather suspicious that something was wrong, and immediately informed her neighbours, who accompanied her to Dr. Dickenson, who pronounced the powder to contain a great quantity of strychnine. From inquiries made it appears that about three weeks ago the prisoner bought of a Mr. Landon, chemist, two drachms of laudanum, and about ten days ago

he purchased at the same shop about 20 grains of strychnine, under the pretence of poisoning a dog belonging to a friend of his, who was a gamekeeper. A few drops of laudanum which remained in the bottle and a portion of the strychnine have been examined by Dr. Richardson, of Newcastle.

Another Hospital is to be added to our present list of those institutions. Owing partly to an amicable difference in the governing body of the Royal Hospital at Putney, and partly to the desire to add to the means of diminishing human suffering, some gentlemen, with the Lord Mayor, Lord Raynham, Colonel Cust, and Mr. G. Moore at their head, propose to found a new Hospital for Incurables.

"From an authorised statement laid before a meeting of the promoters, it appears that in England and Wales 270 Hospitals and other institutions exist at the present time for the cure of disease, by whose agency an incalculable amount of suffering and misery is from time to time relieved. In England, of three only out of the many forms of incurable disease 80,000 persons die annually; 5500 of cancer, 9800 of dropsy, and 64,000 of tubercular diseases; and of these it is estimated that 50,000 are absolutely destitute. If to these be added the victims of other forms of incurable disease the number becomes appalling. For a large proportion of these most afflicted of the human race there is no hope and no aid. The Hospitals established for general relief discharge those found to be incurable, in order to make room for others whose cases afford hope of cure. No one, it was further stated, can really estimate, and few can realise, even in a faint degree, the vast amount of suffering and misery almost withdrawn from public notice. Mr. George Moore, the eminent merchant, of Cheapside, read to the meeting some statistics relating to the Royal Hospital for Incurables, near Croydon, which he, with Dr. Reed and other gentlemen, took an active part in establishing about seven years ago, to show the utter incapacity of a single institution to cope with the continually increasing pressure for admission by this unhappy class of the community. Of 30 candidates at the first election seven years ago, 6 were elected; of 44 at the second, 6 were elected; of 52 at the third, 8; of 87 at the fourth, 10; and so on. At each of the 11 subsequent elections not more than 10 had been admitted, though the number of applicants on each occasion averaged 115. On those facts Mr. Moore argued that there is room for at least another institution of this kind in the metropolis, and for half-a-dozen more in the provinces."

We honour the impulse which leads to the erection of such institutions, which certainly not only can do no harm, but are sure to relieve and comfort the few that can be admitted, and tend besides, as one of the speakers observed, to show that "incurable" disease is often not "incurable" if greater skill and care be applied to it. Our doubt is, whether the attempt to relieve a select few may not deter from larger and more comprehensive attempts to elevate the condition of the whole class. Take London as a whole, and it will be found that one person in ten already dies in a bed provided by public or private charity.

An unfortunate woman has been brutally murdered by her husband at New Barns, near Town Malling, Kent. The man was evidently of weak mind, and suffering besides from some cerebral disorder, in addition to which causes of excitement, his fellow-workmen were in the habit of taunting him with unfounded insinuations of his wife's infidelity. His conduct had long been that of a madman, and his wife's brother threatened to take proceedings, but did not.

On the night of Saturday, the 13th inst., Atkins returned home after a week's absence, and was subsequently attended by Dr. Pope, who found him suffering from congestion of the brain. He seemed to be getting better up to Friday morning, when his conduct was so strange that Dr. Pope told his wife that he had better not be left alone. This was only about two hours before the murder was committed. Between one and two o'clock Atkins' little girl, about eleven years of age, went upstairs, leaving her mother and father in the kitchen. He had been grumbling and talking in a strange manner during the dinner time. The child shortly afterwards heard her mother scream out, and on running down stairs she saw her father holding her mother with one hand, while in the other he grasped a small clasp knife, which it subsequently turned out had very recently been sharpened. She went for assistance, and on returning saw her mother lying on the floor with the knife in her throat, the husband having hold of it. She again ran out, and sent a neighbour's boy to fetch his father. In the meantime the unfortunate woman, who was bleeding profusely from the throat, got to the neighbour's door, that was locked, she endeavoured to gain admittance. Her husband followed, and dragged her from the door, and she then went a short distance down the lane, and got through a gap in the hedge into a field, where she died.

All such cases have their moral; and in the present case the delay in having a violent madman taken care of, was expiated by the poor wife's murder.

We might fill our columns with accounts of child murder. A woman, in the County Cavan, was acquitted of the charge of having strangled her illegitimate child a week old.

Dr. Thorpe deposed, on behalf of the prosecution, that the child was healthy, save that round the neck was an indentation, or black mark, as if caused by strangulation. The internal organs were healthy, and the stomach empty. Corresponding with the external mark on the neck, the flesh underneath the skin was black. The windpipe opposite that mark was flattened or depressed, and the jugular vein filled with blood. The child appeared to have lived two or three days, and died, he believed, from strangulation. Has often known children to be strangled by the funis getting round the neck, which would leave marks; convulsions would cause the state of the veins seen in this child. Thinks the child was not strangled by the funis, as it would not depress the windpipe. Where strangulation is caused by the funis, death ensues either during the delivery or very shortly after.

Mr. W. R. Mackley has been acquitted both of the charge of wilful murder and of that of giving a false certificate. It will be perceived that there was no proof of the fact of delivery, nor yet of pregnancy; still less of any artificial or unnatural mode of delivery. The strongest evidence against the prisoner was his own conversation with Mr. Field; and the reason which Mr. Field gives for not believing him is one of those little touches of nature that give a life-like reality to the whole case. As the trial is so important, we give an account of it in another page.

The letters we published in our last Number from two of the candidates who found themselves unsuccessful at the Preliminary Scientific Examination for the M.B. Degree of the University of London, just concluded, appeared to make out so distinct a grievance, that we made inquiry into the subject, and are able to state *on authority* the real facts of the case. The number of candidates who presented themselves (92) was so much larger than there had been any reason to expect, as to occasion great difficulty in carrying out the practical portions of the examination both in chemistry and in botany. Some months ago the Senate applied to the Government to provide accommodation for the Practical Examination in Chemistry, and was informed in reply that no new building would be erected on the Burlington House site while the destination of the present building remained undecided. There was, therefore, no course open but to make the best arrangements that existing resources afforded; and this was done by the Examiners in Chemistry, Professors Williamson and Miller, in conjunction with Dr. Carpenter. The Examiners were most fully aware of the imperfection of those arrangements, and have made every allowance for them.

No candidate was rejected only for failure in the practical portion of his examination, his performance of the written portion (regarding which there can be no reasonable ground of complaint) being that by which his place was mainly determined. Several of the rejected candidates maintain that the Examiners must have been wrong in their estimate of their written answers; but when it is remembered who the Examiners are, and further, that the regulations of the University require the concurrence of *both* in the rejection of a candidate, such an hypothesis will probably be considered absurd by every competent judge. Moreover, of the whole number (18) rejected in chemistry, all but two were rejected in botany also. The difficulty in the Botanical Examination arose from the impracticability of obtaining the requisite number of specimens of plants of the prescribed orders, 24 candidates for the First B.Sc. Degree having to be provided for as well as the 92 Medical candidates. Two of the plants given for description did not belong to those orders; but the fullest allowance was made by the Examiners (Drs. Lindley and Hooker) for this circumstance, and every candidate was passed who showed knowledge enough of botany to be able to give anything like a description of a plant, and who gave tolerable answers to the physiological questions. But a large number of the candidates had given so little attention to botanical study as to fail completely in the most elementary requirements, and the Examiners felt that they had no option but to reject these. Of the 30 who failed in botany, 16 were rejected in chemistry also; and the remainder must accept their fate as a result of the insufficient preparation which they had made for what there has been a very general disposition to consider one of the unimportant portions of the Medical curriculum, but one on which the Examiners, under the new regulations (which give a distinct place and value to the scientific subjects), feel that they must now exercise the same degree of stringency (within the limits defined by the regulations) as in regard to the other subjects of the examination. It may be well to add that none of the candidates who have failed at this examination will be necessarily thrown back in their graduation, since by the arrangements previously made by the Senate for smoothing over the transition from the old to the new regulations, every candidate who may pass the Preliminary Scientific and the First M.B. Examinations next year, and who would be otherwise qualified to present himself for the Second M.B. Examination in the year 1863, will be at liberty to do so.

A grocer was tried for manslaughter at Nottingham, on the 18th inst., having sold "*essential* oil of almonds" instead of "oil of almonds,"—

It appeared that the father of the deceased, who was an infant, sent his wife to the prisoner's shop for some oil of almonds and syrup of violets. Owing to a mistake on her part, she returned, bringing oil of aniseed instead of oil of almonds, and on the mistake being discovered she returned and desired the prisoner to exchange it for oil of almonds. The prisoner gave her the essential oil of almonds, which is prepared from the bitter almond, telling her at the time that there was prussic acid in it. She asked if it would hurt her baby. He told her that three drops would not hurt it. She took it away and called on a neighbour, who, at her request, administered to the baby some of the syrup of violets with three drops of the essential oil of almonds. The child took it, and almost instantaneously died.

Mr. O'Brien urged that the prisoner, who did not hold himself out as a skilful practitioner or scientific person, and who had told the woman that what he gave contained prussic acid, was not guilty of such gross negligence as rendered him liable to be convicted of manslaughter.

His Lordship, in his summing up, deplored that names so similar should be given to drugs so different in their qualities, the one perfectly innocent, the other a poison. It was desirable that persons administering domestic medicines should first taste what they were administering. It was strange that Mrs. Froggatt, who knew that it contained prussic acid, did not say that her child should not take poison of any kind. The facts of the case were such, that before Lord Campbell's Act it would have been impossible to draw an indictment so as to charge the prisoner with manslaughter upon them. His Lordship having commented upon the facts of the case, the jury returned a verdict of "Not Guilty."

The subject of the exclusion of natives of India from the general service, was brought before the House of Commons again on Tuesday evening, by Colonel Sykes and Mr. Layard. The hardship of the exclusion is made evident from the fact that it was enforced against persons of European extraction, as well as against persons of pure Oriental blood. Dr. Goodall, one of the excluded competitors, was of three-fourths European blood, and had lived nine years in Scotland. Mr. Layard said very justly, that if natives of India were to be hindered from competition because of their unfitness to serve in cold climates, European officers might be hindered from going to India, because they were apt to complain of their livers. The only solid ground on which the decision of the Secretary for War can be defended, is the possibility that Englishmen may not like to be officered by men with dark skins. But if prejudices of this kind be discountenanced by the higher classes, they will soon be dropped by the lower. An English nobleman thought a rich Indian not too dark to marry his daughter.

A "Medical Botanist" has been acquitted of manslaughter, on the ground that the patient with peritonitis might have died even if she had not been treated with capsicum. If people are fools, we suppose no law can protect them from the consequences of their folly; but it is rather hard that there is no legal check upon the ignorant rashness of quacks.

In the Crown Court, Bedford, William Francis Crick, described as a Medical botanist, surrendered to his bail, charged with the manslaughter of Henrietta Mobbs, on the 1st day of January, 1861.

The deceased was a weakly child, eight years of age, and the prisoner, who a few years since was a working gardener, has of late practised Medicine upon the system described as "Coffinism." As usual in cases of death resulting from the treatment under this system, lobelia had been administered, portions being found in the intestines upon the post-mortem examination. It appeared from the evidence that at the latter end of December, the child being ill, her mother took her to a chemist in the town, who prescribed a powder, and recommended, if she was not better soon, that a Medical man should be called in. The child getting worse, the prisoner was consulted, and he attended her to the time of her death, administering pills and powders. The prisoner only attended two days, the child dying at the expiration of that time.

Dr. Hacon deposed that he made a post-mortem examination, and found in the stomach lobelia, capsicum, and cloves —all highly irritating in their nature, and calculated to aggravate the disorder the child suffered from, which was peritonitis.

Dr. Barker, of Bedford, and Dr. Hawkins, of Hitchin, confirmed Dr. Hacon's evidence, but at the close of the case for the prosecution,

His Lordship said he had great doubts if the jury could, upon the evidence, come to the conclusion that the death was caused solely by the medicine administered. The evidence was that the child laboured under peritonitis and died, but no one ventured to say the medicine killed it. To convict the prisoner of manslaughter they must be satisfied the remedies administered were the cause of death. The Medical men say they were improper; but did they kill? The disease from the first was of a highly inflammatory character, and the child might have died if no medicine at all had been given.

The jury, after a brief deliberation, acquitted the prisoner.

This man was tried before the Lord Chief Baron in 1859 upon a similar charge, and was then acquitted. In that case the deceased was a child to whom the prisoner had administered an infusion of lobelia, and, as the Medical witnesses then said, in over-doses, from which it died.

The Anniversary Festival of the Medical Benevolent College, known as "The Founder's Day," has passed off this year with even more than the usually gratifying success. A new legacy of 5000*l.* for the foundation of scholarships at Oxford and Cambridge, was not the least pleasant news Mr. Propert had to tell. Lord Chelmsford and the Bishop of Winchester represented the sister Professions, and made most excellent addresses, and the boys went through their "Speeches" in a manner which deserved and received unanimous commendation.

REVIEWS.

On Food and its Digestion; being an Introduction to Dietetics. By William Brinton, M.D. F.R.C.P., Physician to St. Thomas's Hospital, Lecturer on Physiology at that Institution. 8vo. Pp. 485. London: 1861.

We could name few Physicians more fitted by their previous studies, by their power of mental analysis, or by soundness of judgment, to write a book on Digestion and Dietetics, than the author of the volume before us. The whole subject abounds in difficulties, the results of scientific research abound in contradictions, not only among themselves, but even to the daily and hourly experience of mankind. Unquestionably, that man does well who, recognising the truth of universal, common, and every-day observation, strives to bring it into accord with the experimental researches of the physiologist and the delicate revelations of the balance of the chemist. In no department of vital science is this endeavour more commendable, more necessary for the evolution of truth, than in that which relates to the food of omnivorous man, who not only feeds like an animal, but looks even in his eating to gratify to the utmost a cultivated taste; who has not only a body to support, but whose intellect must be maintained clear and active for his mighty task of subjugating the physical and moral universe.

The first half of the work is occupied in a consideration of the anatomy of the parts engaged in the digestion of food, and the process itself, and its relation to nutrition and bodily waste. Much of these earlier chapters consists of a reproduction of articles by the author in the "Cyclopædia of Anatomy and Physiology," the whole of the subjects being brought up to the advanced position of our present knowledge.

Speaking of the reaction of the saliva, Dr. Brinton suggests that a kind of lactic fermentation it is apt to undergo may assist in explaining the views of some physiologists who assert the dependence of the gastric juice on lactic acid for its well known acidity. Of the two views which regard the acid of the gastric juice,—one as the hydrochloric, the other as the lactic,—Dr. Brinton expresses his opinion in favour of the former; not, indeed, denying the occurrence of lactic acid sometimes as the chief cause of acidity, nor yet its sufficiency to promote digestive solution, but holding that whenever present it is so as a secondary and accidental product. So far as solutive power with pepsine goes, he regards the nature of the acid employed in artificial digestion a matter of indifference, and that the requisite quantities of the acid (which ever is used) seem to be related to its more or less dilute state, rather than to the existence of anything like a relation of equivalent proportion.

Dr. Brinton does not consider the digestive action of the pancreatic secretion, upon protein-compounds, maintained by Corvisart and others who have followed him most closely in his experiments, to be satisfactorily established. He regards the solution which the fresh juice effects, as well as the infusion of the gland substance, as allied to putrid decomposition. He limits the operation of this secretion to a power of rapidly converting starch into sugar, and to its emulsifying action upon fat. Out of the body the pancreatic juice separates fats into their acids and bases, but within the body this is probably prevented by the acid of the gastric juice. The fat within the intestinal villi, as well as that in the chyle, is still oily, and this notwithstanding both the saponifying power of the pancreatic juice and the alkalinity of the fluids within the blood-vessels and lacteals.

The occurrence of flatulence by secretion or transpiration of gases from the blood into the stomach or bowels is denied on the following grounds: 1. Their character and amount being such as the decomposition of food would account for, and their absence in starvation. 2. The fact that some of the gases found there, as carburetted and sulphuretted hydrogen, are not discoverable in any amount in the blood or in the air expired from the lungs, while others, as carbonic acid and nitrogen, found also in expired air, are met with in flatus in most disproportionate quantity. Besides the fermentation of food, Dr. Brinton suggests in certain cases the origin of the flatus in the decomposition of the depraved secretions themselves.

The latter chapters of the work are occupied by a consideration of food and dietetics, the value of all the ordinary articles of food being fully discussed, and to use our Author's own expression, "appraised." This being the most interesting, partly because it is the most practical, we shall be excused for dwelling somewhat at length upon it.

Ever since Leibig's celebrated researches into food, Medical men, in their servile following of that distinguished chemist, have decried gelatin as an article of food perfectly valueless in building up tissue and in supporting the powers of life. Such persons evidently forgot that common every-day experience was opposed to any such dogma, notwithstanding the chemists and the would-be chemical physicians. The addition of gelatin directly or indirectly to soups, etc., and its use in jellies, blanc mange, etc., has continued, and we have no anticipation of its discontinuance even in the preparation of a sick man's dietary. Dr. Brinton takes another and more advanced view of the question by including in it the value of the tissues, tendon, ligament, bone, etc., from which gelatin is capable of being extracted, and which under the operation of gastric juice yield a peptone undistinguishable from the peptones furnished by muscle, etc. He writes:—

"We are quite entitled to assert that they (gelatin and its congeners) are nourishing in that two-fold sense assigned to this term:—capable of undergoing a true assimilation, on the one hand, as well as a combustion which developes heat, on the other. While as regards the tissues yielding them it is exceedingly difficult to distinguish them from even the richest and best meats, save in the differences (relative to degree and not to kind) of their being digested with more slowness and difficulty and assimilated at a corresponding disadvantage."—P. 261. He claims for gelatin, moreover, the mechanical advantage, arising from its consistence, of stimulating the organs of digestion, and dwells upon its value as an agent in the preparation of food. "Not only does its admixture confer on other alimentary ingredients an increase of surface such as renders them more digestible; but we may claim for it a capacity for dissolving various of the ingredients of flesh as well as for inaugurating a process more definitely akin to their digestive metamorphosis by the gastric juice."—P. 262.

In estimating the relative nutritional value of cereal grains, Dr. Brinton says that we ought not "to attach too exclusive or predominant a value to any scanty variation of protein . . . . . The contrast in the proportion of insoluble cellulose and husk is scarcely less important; and is well illustrated by that high per-centage of this ingredient which is notified in the analysis of barley and oats, and which concur with what is, empirically, a well known inferiority of these seeds to those of wheat as food. It is true that, in the rich and abundant food of the affluent, the insoluble elements of the food are sometimes unwittingly reduced below their due amount; so that the function of digestion in some degree languishes for want of the proper mechanical stimulation of the alimentary canal by such substances. But excess, either in quantity or quality has never been the dietetic error of the mass of any nation. And hence the total solubility of a given grain,—in other words, the total quantity of its assimilable parts, compared with that of its husk would, other things being equal, generally dictate its preference as a staple article of food. In like manner we may probably find the alimentary ratio of the starch, less in its absolute per-centage in the

dry grain than in its proportion to the protein. . . . . Fatty matter, sugar, and even salt, doubtless, require somewhat the same estimate."—P. 305.

We should much like to quote the author's excellent remarks upon bread as it used to be, and bread as it is now supplied, white and adulterated, to the English labourer, but we have other subjects that we must notice. Dr. Brinton, while not denying that "scurvy is often privative," thinks that a salt meat diet operates in producing that disease, not only in this way, and by impairing the powers of the gastric juice, but also that the excess of salt aids "in bringing about that faulty and diffluent state of the blood, and of the tissues generally, which the phenomenon collectively known as 'scurvy' seem to exemplify."

Perhaps the most interesting part of the book is that in which the physiological operation and nutritional value of tea, coffee, and alcohol, are severally discussed. Dr. Brinton in regard to the former, flatly refuses to receive the teaching of recent physiological chemists, as Boecker and Lehmann, that the action of tea and coffee is to be explained by the checking of metamorphosis, for "while it must be confessed that such a view is quite compatible with the deleterious properties they exert in large doses, and in some persons, it is not easy to see how it explains the well-known benefits far more commonly and constantly derived from their use." . . . . . "To raise, to better, to facilitate the vital functions by checking metamorphosis, is in flat contradiction with all that we know of life. . . . . So far as we dare use such shallow and simple words for such deep and complex meanings, life is flux, change, metamorphosis."—(P. 355.) He even takes exception to the earliest conclusions from the experiments referred to,—not only because they ignore the manifest variations of habit and idiosyncrasy in the action of these substances, but because some of the most important factors in the argument of the experimenters were not obtained by experiment, but by calculation, while much of the variation actually ascertained by experiment, was no more than may without difficulty be otherwise accounted for. "The variable and important proportions of carbonic acid which the skin and the urine altogether eliminate, afford a cloak quite ample enough to cover the small differences detected; even while our ignorance of the amount of this non-expiratory carbonic acid in man forbids us all reliance on the mere analogies furnished by those animals, of different size and organisation, in whom it has been directly estimated. And a like uncertainty exists with respect to that waste and decomposition of the azotised tissues which the urea and uric acid of the urine tolerably represent. There are good grounds for supposing that the ammonia exhaled from the skin and lungs, and contained in the fæces, perhaps even the ammonia of the urine, as well as its nitric acid, sometimes constitute a total, the variation of which is quite large enough to demand an accurate estimate, before we can accept, intheir minutest details, any moderate variation in the daily excretion of urea by the kidneys alone."—P. 359.

A similar line of argument, but carried to a greater length, is brought to bear upon the alleged diminution of the daily excretion of carbonic acid and urea under the moderate habitual use of alcoholic drinks. "Could any Physician," Dr. Brinton asks, "suppose that tea, coffee and alcohol might be grouped together; that their main influence on nutrition was alike, much more identical; that their effect on the tissues was analogous?" Dr. Brinton devotes several pages to our friends the Teetotalers, allowing all that it is capable of being conceded to them, but bringing the whole question to the test of that common experience and common sense which the extreme advocates of that system so constantly neglect to use. Commending these judicious observations of our author to all parties in the Teetotal controversy, we hasten to make our final quotation from the book before us. Dr. Brinton is writing on the diet of the sick, and suggesting grave doubts on the propriety of that practice of stimulation by alcohol, which has been in danger of falling into a practice of routine. "I have for many years been convinced that, in the less severe examples of both typhus and typhoid, alcoholic stimulation is not only useless, but positively hurtful; that it keeps up the feverous state, retards convalescence, and increases suffering; and this probably by interfering with that process of the metamorphosis and elimination of a poison, which the whole phenomena of these fevers seem to suggest."—(P. 450.) "To distinguish between what will rouse and what oppress, the nervous centres, to decide whether alcohol will excite the brain to activity, or, failing this, increase its oppression; whether æther will stimulate the exhausted lungs to relieve themselves by an increased effort, or will only prostrate them by increasing a task already disproportionate to their powers—this problem, the precise elements for the calculation of which are never alike in any two cases, and the practical answer to which no rules will ever enable our Profession to decide, is at least illustrated, as regards these alternatives, by the physiological action of alcohol."—P. 451.

The subjects of Vomiting and Dietaries have each been considered in an appendix.

We conscientiously commend this book to our readers as one of the best that has yet appeared upon the subjects of which it treats.

FOREIGN CORRESPONDENCE.

ITALY.

Rome, July 3.

PROSTITUTION AND SYPHILIS IN ROME.

In this city we have no authorised "houses of tolerance" (to use the expression of our polished neighbours on the other side of the Alps), as it would be contradictory to the spirit of priestly rule to legitimise by temporal authority a thing daily condemned by the clergy in their spiritual exhortations. It is true that our rulers are less scrupulous in other respects; and in the lotto, the stage, and the ballet, make certain concessions to the public which are not in accordance with the strict laws of morality; but there always remains a difference between allowing the worship of Mercury and Terpsichore, and erecting temples to Venus Vulgivaga. Nevertheless, the private calling of prostitutes is, generally speaking, not impeded, and they have more liberty accorded to them here than is the case in other large towns. The police have no control over them, and the superintendence of these unfortunates is in the hands of the guardians of public morality generally, viz., the priests of the fifty-four parishes into which the Eternal City is divided. These are, again, under the immediate control of the Cardinal-Vicar, that is, the Bishop who represents the head of the State in its Episcopal functions. This dignitary now and then finds it necessary to interfere, whenever he thinks the seandal too great, and believes it to be his duty to protect an individual, or a whole family, from moral decadence. In such cases, the individual in question is carried away from her residence at any time of the day or night, and brought to the Hospice of St. Michele, a large institution for educating and sheltering a great variety of refractory and other individuals. One part of it is reserved as a prison and house of correction for prostitutes. The drawback to this system is, that a sanitary control of prostitutes is very difficult, and is not even attempted; if the State acts thus, from a moral point of view, with the intention of leaving profligacy to be punished by its natural consequences, it certainly attains this end; and the diseases consequent upon this vice are, therefore, very general in town and country. A progressive spreading of syphilis from Rome, in a centrifugal direction, to the neighbouring places has occurred, and the small towns in our proximity, such as Tivoli, Frascati, Albano, and others, which a number of years ago were very slightly tainted by venereal disease, are now considerably affected by it; and the once celebrated beauty of their men and women, which was formerly of a truly magnificent character, is fast disappearing. These places are, therefore, no longer that apparently inexhaustible mine of strong and healthy wet-nurses, which they were once considered to be, when almost every young woman was capable of filling that position. In fact, many an old Albanese has nursed a dozen little Romans at her breasts. The places mentioned are, therefore, no longer resorted to by those in want of wet-nurses, and we have to go further if we wish to find incorrupt manners and uninfected constitutions.

Scrofulosis, tuberculosis, and rickets have greatly increased in Rome and its neighbourhood within the last decennia. This may be the effect of the spreading of syphilis, although we cannot at present give evident proofs for such a supposi-

tion ; but we ought certainly to recollect that a great many syphilidologists consider the diseases just named to be hereditary consequences of syphilis. M. Diday, for instance, in his work on the "Syphilis of Newly-born Infants," expresses his conviction, that in children of syphilitic parents, rickets and the morbid disposition inherent to that disease, are found as the only residuum and offspring of the syphilitic dyscrasia, which contaminated the blood of the parents.

It is impossible to give numeric statements regarding prostitution, as it exists in Rome now-a-days, with any degree of accuracy. It cannot be denied, however, that public decency is less violated here than perhaps in any other capital of Europe ; and this ought to be thankfully acknowledged.

The Surgical Hospital of S. Giacomo, in the Corso, contains wards for syphilitic patients. The men are in one common room, which is somewhat separated from the rest ; and the women in another special ward, which is quite apart from any other. The numbers of patients received there is small, when compared to the number of inhabitants, which amounts at present to 160,000 ; but it is still smaller, when compared to the frequent occurrence of the disease. There is certainly no want of useful benevolent institutions of every kind in this city ; but the administration, and the use made, of these numerous, liberally-endowed and well-planned institutions, is in every way deficient. With regard to the wards for syphilitic patients, it seems a great mistake, that only such persons are received as inmates who are obliged to keep their beds ; all others are treated as out-patients, and they, of course, propagate the disease further among the public. Besides, the persons received as in-patients, are frequently discharged before they are thoroughly cured. This is not only dangerous to the individual concerned, but also to the public health. The treatment of the disease is based upon those antediluvian and long-exploded notions, according to which gonorrhœa is an equally virulent disorder with chancre, and capable of giving origin to secondary syphilis. Both distempers are, therefore, treated with mercury ; no regard is had whether a primary ulcer is indurated or not, no attempts are made to destroy gonorrhœa or the primary ulcer as soon as possible, but in both cases the secretion is, according to the doctrines of humoral pathology, allowed to exist for any length of time, in order that the system may thus be purified from the poison, which has been introduced into it. The speculum is not properly used. The wards containing females are inaccessible to the young Surgeons, who have to make a two years' practical study in the S. Giacomo Hospital. The consequence is, that stricture, incomplete recoveries, and useless mercurialism, are of every-day occurrence. Generally speaking, however, the climate is favourable to the course of these diseases, and severe forms of gonorrhœa with cystitis and peri-urethral abscess, gangrenous primary ulcers, virulent bubons, etc., are, on the whole, rare. The relative proportion of secondary affections to the primary disease does not offer anything unusual. The series of secondary symptoms appears in the same succession as elsewhere, viz., swelling of the glands, eruptions of the skin, ulcers of the throat, etc. They generally commence in the second month ; of the exanthemata the papulous, and also psoriasis, are very common. Tertiary forms are not rare, but in spite of gross negligence, they are not of a destructive character.

I have seen very favourable curative effects of the climate on foreigners who suffered from old residuums of syphilis, which had been long under treatment., but never been entirely eradicated, not even by iodide of potassium and sarsaparilla, and which it is often very difficult to distinguish from traces of a mercurial cachexy ; such as superficial little ulcers of the mucous membrane of the mouth and pharynx, with constant redness and loosening of the parts ; a continuous desquamation of the epidermis at the angles of the mouth, with now and then a superficial ulcer there ; dark spots on the chest and arms, etc. In such cases a journey to Italy from the North, a winter's stay in a mild climate, with daily exercise in the open air, and all the other changes in the mode of life connected with it, have often effected a great improvement, which was no doubt due to a favourable change being brought about in the nutrition and reproduction ; or the remedies mentioned before, together with bitter medicines and iron, have had a beneficial effect.

As sulphur-baths are very useful in cases of this kind, I will mention that there are three such mineral springs in the neighbourhood of Rome, the use of which, in cases of long-standing syphilis, is very highly thought of by Doctors as well as by patients. These are, first, the baths of Tivoli. Everyone who has travelled from Rome to Tivoli has seen the aqua albula, and, through his olfactory nerves, has been made acquainted with the fact that it contains sulphuretted hydrogen. The water rises in the Campagna, a little below Tivoli, from two lakes, which once were craters, and where hot and cold springs mix. This mixture has, at the outlet of the second lake, a temperature of 77° F., is rich in sulphur and alkalies, and what is more rare in sulphur springs, it also contains a large amount of carbonic acid gas. The bathing season lasts from the end of May until the end of July (at most). The patient either drives there every morning from Rome (which can be done in two hours) and returns the same day, or he may live in Tivoli, and take the omnibus or a donkey every morning down to the baths, which are at one hour's distance. The water is also carried to Tivoli in tubs.

2. The waters of Stigliano (aquæ Stygianæ,) are more important than the aqua albula, as they contain a very large amount of sulphur, besides iodine, and have a very high temperature. They are a short day's journey from Rome, in a north-westerly direction. The temperature of these springs amounts to from 103°. to 122° F., and as they have a very powerful influence upon the system, they are especially suitable for torpid cases of disease.

3. Finally, the mineral waters of Viterbo are very celebrated and much used. A spring containing iron and carbonic acid rises there, close to a warm sulphur spring. These waters have escaped the fate of seeing their celebrity for centuries covered with grass, and their ancient contrivances for bathing overgrown with ivy. On the contrary, they have always been greatly esteemed, while those of Tivoli and Stigliano were for a long time given up to archæology, and have only within the last decennium been restored to balneology.

On these and a few other mineral waters I shall give you some more information in a future letter. To-day I confine myself to mentioning their effects in venereal disorders. To return to the subject from which I started, I will only express my opinion that the authorities here might, while avoiding giving unnecessary trouble and annoyance, and without legitimising houses of ill-fame, still establish a hygienic control over prostitutes ; for even if it were their intention to leave the individual sinner to his natural punishment, they still owe it to the State and the progeny of such persons, to do all in their power to prevent this disease from being transmitted and spread by those infected. In order to effect this end it would be desirable that a number of Medical men should be especially instructed in the diagnosis and treatment of syphilitic disorders. They should study the subject practically in Paris for at least six months, and several wards should be opened in different parts of the town for facilitating the cure of the infected. Quite recently a comprehensive *règlement* for prostitutes has been established in Turin ; and several points of it might well be applied to Rome ; but as no great love exists here for anything that comes from Turin, I do not expect that any change for the better will take place for some time to come.

SWITZERLAND.

Zurich, July 1.

PROFESSOR MOLESCHOTT ON THE NERVES OF THE HEART.

Since Professor Weber, of Leipsic, first made his celebrated experiments on the action of the electric current upon the vagus, by which it was shown that a strong galvanic stimulus applied to this nerve may cause the heart's action to disappear temporarily, most physiologists have considered this nerve to possess an inhibitory influence upon the movements of the heart ; and some authors have called the vagus the antagonist of the sympathetic, which latter was the only motor nerve animating the muscular substance of the heart. This theory of inhibition has been assailed, especially by M. Schiff, who has repeatedly found that, if the vagus be excited by a feeble electric current, the heart's action becomes more frequent ; and this could only be the case if the vagus were the motor nerve of the heart, the excessive irritation only of which made the pulse less frequent, or even caused it to cease entirely.

M. Pflüger and others have pronounced against M. Schiff's views, and the opinions as to the functions of the sympathetic nerve are equally contradictory; for, while M. Wagner, of Göttingen, has seen a lesser frequency of the pulse caused by irritation of the sympathetic nerve, MM. Weinmann and Heidenhain have never observed this; and others, as Claude Bernard and Henle have even remarked a greater frequency of the pulse after its excitation. This question being, therefore, at present in a very unsatisfactory state, M. Moleschott, Professor of Physiology at this University, determined to make a series of experiments in order, if possible, to settle it. The result arrived at by him has been, that all the positive statements previously made regarding the phenomena observed after excitation of the vagus are correct; that the negative statements have been the consequence of unfavourable conditions in making the experiments; and that the theory of inhibition must be given up. As this question is of considerable importance for practical Medicine, and intimately connected with our notions on the mode of action of digitalis in the system, your readers will, no doubt, be interested in an account of Professor Moleschott's experiments.

The Professor first endeavoured to determine the effect of a feeble excitation of the vagus in influencing the heart's action; and he found that, on applying a weak mechanical, chemical, thermal, or electric stimulus to this nerve, the pulse rose considerably. Amongst the mechanical stimuli stretching appeared to be most effective, as it can be easily graduated by the employment of different weights; but friction and pressure also yield the same results. The chemical stimuli used were salt water, the bile of frogs, and the drying out of the nerve; these latter had the most considerable effect of all; as, on applying salt water to the vagus of a rabbit, the pulse rose from 166 to 231; that is, 65 in the minute, or $\frac{2}{3}$ths of the frequency observed during repose; and on touching the vagus of a frog with frog's bile, the pulse rose from 18 to 40 (more than $\frac{1}{2}$). Thermal irritation caused an increase of $\frac{1}{11}$th in the rabbit (from 224 to 244); of $\frac{1}{9}$th in the frog (from 36 to 40). The electric stimulus produced an acceleration amounting to $\frac{3}{5}$ths (from 190 to 232) in the rabbit, $\frac{2}{5}$ths (from 30 to 42) in the frog. In the frog a more powerful stimulus is generally necessary to effect such results than in the rabbit. The frequency of the pulse is also increased if the vagus has been cut through, and the peripheric end of the nerve is excited. The increased frequency is, therefore, no mere reflex phenomenon caused in the cerebro-spinal centre, nor, if the central end of the nerve is excited, does the pulse become quicker. The excitation should generally last from fifteen to thirty seconds if the experiment is to prove successful, and in many cases a considerable alteration in the heart's action is observed long after the excitation has ceased. Pulsus dicrotus is sometimes consequent upon a long-continued excitation of the vagus, after which the whole of the ventricles contract with two intermissions.

Professor Moleschott further experimented upon the influence of the excitation of the sympathetic nerve upon the frequency of the pulse; and found that a feeble mechanical and electrical irritation of it also effects an acceleration of the heart's action, which in the rabbit sometimes amounts to from thirty to forty pulses in the minute. This is likewise only observed if the end of the nerve is acted upon, being in direct connexion with the heart; and not if the cervical portion of the nerve, after having been separated from the heart, is excited. A strong electric excitation of the sympathetic nerve diminishes the frequency of the pulse, and may even bring the heart to a temporary standstill; and when the excitation ceases, the heart and the nerve may recover from their exhaustion, so that, if a feeble current is afterwards applied, the frequency of the pulse may again be augmented. The sympathetic nerve has, therefore, the same influence upon the heart as the vagus.

If the feeble excitation of the vagus, which at first increases the frequency of the pulse, is continued for some time, the heart's action becomes gradually retarded. A medium excitation of the vagus may at first render the pulse more frequent, but afterwards it becomes more rare, and at last the heart is brought to a standstill. Generally a very strong irritation of the vagus stops the hearts action immediately, although a few pulsations at intervals may precede its entire cessation. The frequency of the pulse then gradually returns after some time, and especially in the frog, the heart may still remain motionless for a few seconds after the stimulus has been removed. If, in consequence of a feeble excitation of the vagus, the frequency of the pulse is increased, this is accompanied by either a positive or a negative variation of the density of the current proper of the nerves, which does not take place if the heart's action is stopped. A weak excitation of the vagus does not only increase the frequency of the pulse, but also the lateral pressure of the blood against the walls of the arteries.

It is therefore evident that the innervation of the heart by the vagus is quite analogous to the influence of other motor nerves—as, for instance, that of the anterior roots of the spinal nerves upon muscles. The process is, however, rendered complicated by the presence of the ganglia of the heart. This organ is animated by two vagi and two sympathetics, each of which singly causes, if excited, the same changes in the frequency of the pulse. The state produced in one nerve is, therefore, transferred within the heart to the three other nerves, probably by the action of the ganglia. The stoppage of the heart's action must therefore be considered as a phenomenon of fatigue induced by the overpowering influence of a strong excitation. After this latter has ceased, the fatigue continues for some time, and the normal frequency is only gradually restored. When the vagus is fatigued, but not exhausted, the heart may, by excessive stimulants, be more easily brought to a standstill than at first; and thus M. Schiff's statement that stimuli of equal intensity, when applied to the vagus, produces stoppage of the heart more easily after death than during life can be explained. All these results lead to the conclusion that the vagus is the true motor nerve of the heart, and has nothing to do with inhibition.

The theory of the inhibitory influence of the vagus, which must henceforth be entirely discarded, has up to the present time appeared satisfactory to physiologists, not only because by a strong excitation of the nerve the heart's action is stopped, but also because the heart again begins to beat after some time, even if the strong excitation is continued. But although it is quite certain that, after the heart's action has been stopped by strong excitation of the vagus, it again begins to beat, and even as frequently as it did before during repose, if the stimulus is allowed to act for several minutes, this cannot be construed as the result of over-excitement of vagus; for when the heart beats less frequently during the excitation than it did before, it is only necessary to increase the intensity of the stimulus to again cause a stoppage; and when, under such circumstances, the pulse returns to its original frequency, such is the case only because the excitability of that portion of the nerve which is being irritated has been annihilated by the stimulus; so that its excitation is equivalent to zero. If, however, the electrodes are removed further on towards the periphery of the nerve, so that an unexhausted portion of the nerve is touched by them, the same stimulus will again cause a stoppage of the heart. That even a strong excitation of one vagus should, after some time, no longer be able to effect the stoppage of the heart, is easily to be explained by the presence of the three other nerves (one vagus and two sympathetics), the action of which is antagonistic to that artificially produced in the fourth; and if the heart again begins to beat in spite of a continued strong excitation of the vagus, this is the case, either because so small a portion of the nerves of the heart is excited that the whole nervous power of this organ cannot be exhausted thereby, or because the excitability of those portions of the nerve which are touched by the electrodes have been partially or entirely destroyed by the irritation. A certain portion of the nerve may be said to be entirely dead, if, in spite of a strong excitation of it, the heart's pulse gradually returns to the same frequency which it possesses during repose.

Another proof for the theory of inhibition was believed to be the circumstance that, after a section of the vagi has been performed, the frequency of the pulse is increased. This was supposed to be due to a paralysis of the so-called inhibitory nerves, as a separation of such nerves from the centre would cause an increased motion in the same way as a section of other motor nerves stops the transmission of the will to the muscles. With regard to this, Professor Moleschott observes that the section of both vagi by no means always produces an increased frequency of the pulse; on the contrary, he has found that immediately after such an operation, the pulse in rabbits generally becomes more rare than it was after laying bare the nerve. In five experiments of this kind an increased frequency of the pulse, after section of the vagi, only took

place once, and in that one case the increase was very trifling. Some time after the operation (from half-an-hour to several hours) the frequency may rise considerably, but this is not constant, and soon disappears. The explanation of these facts is very easy. On being cut through, the vagi are more or less considerably irritated, and it depends upon the degree of irritation whether the frequency of the pulse is augmented or diminished. It is diminished if the irritation is very strong, which is mostly the case. The increased frequency observed at a later period is consequent upon a slight exudation, which presses upon the nerves. Shortly before death the pulse again falls, which is partly due to over-excitation of the vagi, partly to general weakness.

Finally, the action of the continuous galvanic current upon the vagus has been believed to be a proof for the theory of inhibition. This, its last stronghold, however, has also been demolished by Professor Moleschott, who has found that in such experiments, the direction of the current is of paramount importance, as the direct current always produces an increase, and the inverse current a diminution of the frequency of the pulse, as is the case in motor nerves generally, and the later phenomenon is quite irreconcileable with the theory of inhibition. The learned Professor sums up his researches in the following words:—"The heart is animated by four very excitable nerves which may easily be over-excited; these four nerves, two vagi and two sympathetics, have a peculiar consensus, which is no doubt due to the action of the ganglia of the heart, so that the state of irritation or over-excitement, which is produced in one of the nerves, is transmitted to the three others; but it is not possible to exhaust permanently the other three by over-excitation of one nerve singly, as stimulants, which would be powerful enough to effect this, would soon kill the excited portion of the one nerve, and, therefore, lose their effect upon the other three; such an effect being only possible as long as the nerve acted upon retains part, at least, of its excitability."

GENERAL CORRESPONDENCE.

HOSPITAL REGISTRATION.

LETTER FROM DR. PEACOCK.

[To the Editor of the Medical Times and Gazette.]

SIR,—I yesterday received the Report of the Committee which met at Guy's Hospital about three weeks ago, to suggest a system of General Hospital Registration, and trouble you with a few remarks on the subject.

I cannot but think that the proposed system of registration is in some respects too elaborate, in others too limited. First, the columns of male and female would be much better omitted, and the two sexes registered separately. Secondly, the column of Social Condition (married, single, or widow) affords information of comparatively little importance in reference to the majority of cases. Thirdly, that which contains the "Days in Hospital" might also with advantage be omitted, for the information as regards the whole of the cases treated could be more readily obtained by calculation than by enumeration; and, in particular classes of cases, the dates of admission and discharge afford the means of calculating the duration of residence. Fourthly, I think that a single column headed "Name of Disease or Injury" is not sufficient, but that for a satisfactory system of registration it is necessary that there should be a column for "Disease for which Admitted," and a second for "Complication, or Subsequent Disease," and that there should be lines in which the result of each of these can be stated.

The system of registration introduced at the Edinburgh Infirmary by the late Professor John Reid, and which was for two years under my superintendence, was arranged on this plan, and during the four years I was Physician to the Royal Free Hospital I employed a similar method, and, in preparing statistical tables, found the information afforded by the double column of essential importance(a). While, on the other hand, in the registration hitherto adopted at St. Thomas's, where there is only the single column, I have often felt difficulty both in recording the result in the cases treated by myself, and in obtaining data as to the general results of Hospital experience in any given class of diseases. I would also suggest that the last column should be headed, not simply "Remarks," but "Cause of Death and Remarks," so that the precise cause of death may be recorded in all cases in which it can be ascertained.

As to the system of classification to be adopted in the reports, there will probably be much difference of opinion among those who take an interest in Hospital statistics; but I would suggest that the best system will be that which is the simplest, which leaves the least room for errors of diagnosis, and is the least based on theory, and I cannot but think that the system alluded to in the report is open to objection on these grounds. I may also say that I much doubt the desirableness of any similar system of registration being adopted by all the Hospitals, and think that the registers would be more likely to be well kept, and the reports carefully prepared and illustrated, by leaving each institution to adopt its own system.

Not wishing to trespass too much on your space, I have intentionally expressed my views concisely.

I am, &c.

20, Finsbury Circus, July 18. THOMAS B. PEACOCK.

(a) See Statistical Tables of Royal Infirmary of Edinburgh, 1842 and 1843; and *London Journal of Medicine*, vol. iv. 1852.

POOR-LAW MEDICAL REFORM ASSOCIATION.

LETTER FROM MR. GRIFFIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall feel obliged by your allowing me, through the medium of your Journal, to inform the Poor-Law Medical Officers that I have this day received a communication to request my attendance before the Select Committee on Poor Relief on Tuesday, the 23rd inst. I hope those gentlemen about to give evidence will not delay its preparation, as the subject is of too important a nature to trust entirely to memory.

I have this day received £2 from the officers of the Saffron Walden Union, the only subscriptions forwarded to me since May 24 last.

I am, &c.

RICHARD GRIFFIN.

12, Royal-terrace, Weymouth, July 20.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 25, 1861.

DR. BABINGTON, President, in the Chair.

A Paper, by Mr. HENRY LEE, F.R.C.S., was read

ON SYPHILITIC INOCULATION, AND ITS RELATION TO DIAGNOSIS AND TREATMENT.

The Author commenced by stating that the whole of the facts recently made out with regard to syphilitic inoculation had not hitherto been collected in a condensed and separate form. The most ordinary kind of syphilitic inoculation was that which commenced immediately upon the application of the poison, and was characterised by the suppurative form of inflammation. But that which was of so much importance, as far as the patient's constitution was concerned, had usually a period of incubation of some weeks' duration. This form of disease commenced as a pimple, a crack, or an abrasion, and was accompanied by the adhesive form of inflammation. The first of these forms of disease was usually, but not always, developed upon a part which retained much of its natural softness and pliability. The second was generally, but not always, developed upon a part which became indurated in a very peculiar and characteristic manner. In cases where the sensation failed to furnish a means of diagnosis, the secretion of the sores examined under the microscope would enable a Surgeon to distinguish between the two diseases. The Author then gave quotations from Jenner to

show that the character of the secretion had been made use of as a means of diagnosis in other diseases. The Author had pointed out in the year 1856 that the adhesive form of primary syphilitic inflammation did not furnish a secretion which, as a rule, could be again inoculated upon the same person. These facts, although now generally acknowledged, had been received in a very slow and guarded manner by the Profession. Thus, as late as the year 1858 we had a most eminent authority on the Continent saying that the description of one of these varieties of disease, as regarded its inoculation and mode of development, would apply almost equally well to the other. Besides the adhesive and suppurative actions as the result of syphilitic inoculation, the Author noticed two other forms of disease, namely, that which is accompanied by lymphatic absorption, and that which is accompanied by mortification; but at the same time stated that the observations which followed would apply to the two first-mentioned diseases only, viz., the adhesive and the suppurative forms of primary specific inflammation. Although, as a rule, the inoculation of the secretion from an indurated sore would produce no effect upon the same person, yet, under certain circumstances of increased action or irritation, some result would follow, but that result would be in a very modified form, and would not resemble the effect which would be produced by the inoculation of the same secretion upon a person who had not previously had the disease. A drawing of such a modified action on the eighth day was given. In contrast to the effects of the inoculation of the secretion produced by the adhesive inflammation, were those produced by the inoculation of the discharge from naturally suppurating sores. These were highly contagious, although the sores themselves did not infect the patients' constitutions. Inoculations from suppurating sores might be repeated a great number of times, either upon the same or upon another person, but inasmuch as they did not produce constitutional syphilis, it was a misnomer to call this proceeding, however often repeated, "syphilisation." In unmixed cases, the inoculation of the secretion would furnish an additional test of the nature of the disease. If the sore were of the naturally suppurating kind, the specific pustule would be produced by the inoculation of its secretion upon the same patient. If the sore were of the indurating and infecting class, inoculation in the same way would be followed by no result. In the one case the patient's constitution would not be infected. In the other, some form of secondary symptoms would develop itself. A case was then given where the tests by the microscopic characters of the secretion, and by inoculation, had corrected the impression given by the sense of touch. There were, however, cases where neither the sense of touch, nor the nature of the secretion, nor the result of inoculation, would give positive information as to whether the patient would have secondary symptoms or not. These were the mixed cases, in which a twofold inoculation had taken place. They occurred for the most part in patients who had never suffered from constitutional syphilis. Twofold inoculation might occur either on the same or on a different part, at the same or at different times. When it occurred on the same part and at the same time, the results of the suppurative action would first develope themselves, and, subsequently, those of the adhesive action. This depended upon the different periods of incubation which naturally belonged respectively to each kind of disease. If the inoculation of the suppurating form of disease occurred after the inoculation of the adhesive, then the results of both might be developed simultaneously, and under these particular circumstances it became extremely difficult to form an accurate diagnosis of the nature of the case. The suppurative action would not prevent the infection of the patient's constitution; the adhesive action would not prevent the appearance of the "special pustule" upon inoculation. A well-marked case of double contagion, accompanied by a local suppurating sore, and followed by secondary symptoms, was recorded. The different results obtained by inoculation had been ascribed to the differences of individual constitutions. But that these different results depended more upon the kind of secretion used was proved by inoculating different forms of disease upon the same patient at the same time. The case of a patient was described, who, under very peculiar circumstances, was inoculated with the secretion of four different kinds of syphilitic sores at the same time. The results were different in all the four series of inoculations, and in some of these the differences were marked in the strongest possible way. The secretions made use of were—1st, that from a primary indurated chancre; 2nd, that from an inflamed and suppurating secondary mucous tubercle; 3rd, that from a primary mixed form of inflammation; 4th, That from the patient's own most intractable and serpiginous sores. In the first case very slight results of any kind were produced, and the inoculations failed altogether after the series second in order. In the second case more effect was produced, but these also failed after the series third in order. In the third case the specific pustule was produced through eight series of inoculations, and might have been continued. In the fourth case the sores produced were so extremely irritable and painful that the inoculations on that account were not continued beyond the series third in order. This patient's own serpiginous sores had continued open more or less during a period of six years, and it was remarked that this long period of continued self-inoculation had not rendered him insusceptible of further inoculation either from a suppurating sore or from the more virulent poison secreted by his own ulcers. As two kinds of syphilitic action might be inoculated at the same time, so might some of the syphilitic virus be inoculated with some other kinds of animal poison. Practically, by far the most interesting question here presented was, whether syphilis could be communicated in the practice of vaccination. An analysis of the opinions of 539 members of the Medical Profession, as collected by Mr. Simon, was then given. At the time these observations were made and the opinions of these gentlemen recorded, it was generally believed that the infecting variety of syphilis had not a longer period of incubation than the suppurating kind. The results were consequently in general watched during the first eight days only, and anything that happened subsequently to that period was attributed to some other cause. With the additional knowledge now obtained regarding the natural periods of incubation of the two kinds of syphilitic disease, it was evident that a fresh series of observations must be made before the question could be considered as settled by the general experience of Medical men. Aided by these recent investigations, Dr. Vunnois had collected together a considerable number of cases in which vaccination has been followed by the primary specific adhesive inflammation, and this in its turn had been succeeded by secondary symptoms. An abstract of the cases in which syphilis had thus been communicated by vaccination collected by Dr. Vunnois was then given. The conclusions arrived at in respect to the various points contained in the paper were principally—1. That the primary specific adhesive inflammation might be communicated to a person who had not previously had syphilis, either by a primary or by secondary syphilitic affection. 2. That the infecting and non-infecting varieties of syphilis might be recognised by their respective periods of incubation, by the kind of inflammation by which they were accompanied, by the nature of the secretion produced, and by the results of inoculation. 3. That the infecting and non-infecting varieties of the disease might be inoculated upon the same part at the same or at different times. 4. That in like manner the cow-pox and syphilis might be inoculated at one and the same time; and that, when such a two-fold inoculation occurred, each disease developed itself at the expiration of its natural period of incubation. 5. That the simultaneous inoculation of two poisons in such an instance was analogous to the inoculation at the same time of the adhesive and suppurative forms of syphilitic disease. 6. That the vaccine lymph was not capable of communicating syphilis, but that its presence did not prevent the secretion from a secondary syphilitic sore, or the blood of syphilitic patient, when inoculated, from producing their natural results.

Dr. O'Connor could not agree with the Author. First, in the distinction sought to be drawn by him between what he calls non-infecting, in contradistinction to infecting syphilitic sores. He (Dr. O'Connor) was satisfied that no such distinction could be drawn. A sore is either syphilitic or not, and all syphilitic sores are infecting. It is true that the development of the secondary or constitutional symptoms is much affected by constitutional causes. There appears to be established what Gamberini calls the "truces of syphilis." In those cases there is, as it were, a contention between the syphilitic poison, and the constitution in which the poison is for a period dormant; but in course of time it is again predominant

and fully developes itself. In those cases where the appearances of the secondary or constitutional symptoms are for a long time delayed, it is supposed that the disease is cured, whereas it is only controlled by the powers of the constitution, and its real nature is by many not recognised. Next, with regard to the boy, of 14 years of age, sent to the Lock Hospital by Mr. Lee, he (Dr. O'Connor) believed the case was one in which, if truly syphilitic, and mercury was not properly administered, constitutional symptoms would most assuredly develope themselves. With regard to the treatment of syphilis, his observations at the Royal Free Hospital, where he had observed many thousand cases in every stage, from the appearance of the most manageable chancre to extreme cases of constitutional disease, his conviction was, that syphilis, as a disease, could only be treated with safety to society by the proper administration of mercury.

LEGAL INTELLIGENCE.

ALLEGED CRIMINAL ABORTION.

William Randall Mackley was placed at the bar, charged on indictment, and also on the Coroner's inquisition, with the wilful murder of Martha Curtis, at Great Horton, on June 26 last. The prisoner pleaded "Not Guilty" to this charge, and also to a subsequent indictment for returning a false certificate to the Registrar of Deaths.

The following is an abstract of the evidence of importance:—

Hannah Dracup: I live at Great Horton, and know the prisoner, and know Martha Curtis. She was housekeeper to the prisoner. I saw her in our doorway, 100 yards from Dr. Mackley's house, a week before she died. She was then much as usual. I saw her again on Saturday in her room. The Doctor fetched me, saying she was very poorly, and that he wanted me to go up and see her; I found her in bed. There was no one in the house except her and Mackley. I went again the following day. Mackley was in the kitchen, and said that Martha's illness was inflammation of the bowels. He came up and gave her an injection while I was in the room. I saw her on Tuesday, when her mother was there.

Cross-examined: It was not the prisoner who desired me to come again. I was with her on the Wednesday, about ten minutes before she died. She did not speak then. I saw her occasionally, and never observed any difference in the appearance of her person.

By the Judge: She merely came into our doorway to talk. She seemed as usual. I did not notice that she seemed in the family-way. When I went to see her on Saturday she said it was a stomach complaint from which she suffered. She afterwards said it was inflammation of the bowels, and I made her a bran poultice.

Mary Fletcher: I am a shroud-maker. I laid out Martha Curtis.

Cross-examined: I saw her the day before she died. The prisoner came for me about five in the morning. She complained of pain in the bowels. I observed no signs of her having been in the family-way. I have seen her constantly. I laid her out, and observed no blood about the linen. I put a piece of plaister on a place where the skin had been rubbed off. She vomited twice before she died. She said, "Oh, Mrs. Fletcher, I shall never mend unless I get a passage." She never complained of anything else. I have often heard her complain of a pain in the stomach—for a year or more.

Frederick William Graham: I am Inspector of Police. After the post-mortem examination, I searched the prisoner's house. I found his day-book, and a portmanteau containing the linen produced.

Cross-examined: A thorough search was made. The portmanteau was unlocked. It was in an attic over Martha's room. There is no access to it except through her room. The prisoner came to my office to see me in order to have witnesses examined at the adjourned inquest, and I arrested him on the charge of giving a false certificate. He said he had given a true certificate, and that he could not get a passage through her for nine days before her death. At the inquest a juryman produced a letter which was read to the coroner and jury. The name of the juryman was Anderson, I do not know that he demanded that Field should be called. I had seen Field before. I had sent for him, and not at Anderson's suggestion; but in consequence of seeing the letter sent to him. The subject of abortion was mentioned at the first inquest on the 2nd of July, and the means of producing it by some sharp instrument. I gave directions to have the entrails examined for poison. I gave orders for the disinterment. I acted without the authority of any magistrate, but on that of a letter I received on Sunday, June 30.

James Field: I am a Surgeon at Dudley-hill. I know the prisoner. I have known him about sixteen years. I first knew him at the Leeds School of Medicine. I have been in the habit of seeing him at my house, but not lately. I saw him on Monday, June 17, on horseback, in the fold near our door, at about half-past eleven. I asked him to call to dinner. He came about one o'clock. Jane Law was in my service then, and she came in before dinner to lay the cloth. There was conversation going on between the prisoner and me at that time. The conversation began while he was putting his horse up. He said he had been ill, and I observed he was more nervous than usual. When we got in he said, "Well, Field, have you ever produced abortion?" I said, "About what time?" He said, "About the sixth month." I said "Never." He said, "Well, I'm in a devil of a fix; I've a young woman in the family-way, about six months gone, and I have used every means in my power to produce abortion and been unsuccessful." I asked him what means. He described the instruments he had employed, among which was a strong pointed wire. I exclaimed, "God bless me, man, you will kill the woman!" and told him he had better let me look at her, as she might not be in the family-way at all. He said, "No, no; if I don't know, who should?" I said he would kill her, and then it would be all up with him. He asked me if I had any works on midwifery. I showed him two, but he did not peruse them. I told him they did not contain any plates. This was before dinner. I received a summons, and was taken in a cab to attend the coroner's inquest.

Cross-examined: Previous to my summons I received a letter from Anderson, one of the jury. Mr. Mackley, senior, has that letter. This is it. I wrote an answer to it directly. I was in my own house when I was summoned. I had seen Anderson once, between the time of receiving his letter and the inquest. When I first saw the prisoner I understood from him he was going to Gomersal on a money matter. I never said that the conversation went on before, during, and after dinner on the subject of abortion. I have known Anderson seven or eight years. He was first introduced to me by the prisoner. He lives at Willesden.

Re-examined: I had heard nothing of this affair before I was summoned. I have a distinct recollection of what the prisoner said with reference to introducing the wire.

By the Judge: At the time I said "God bless you, man, you will kill the woman!" I did not anticipate danger to her, and doubted whether he had used the instrument he described at all. I doubted him because he had made so many extraordinary statements, entirely without foundation, to me before.

Jane Law: I am servant to Mr. Field. I remember the prisoner dining with him, and being in the room. I heard the prisoner say he had been using a small pointed wire to procure abortion, and my master said he would kill the woman, and then it would be up.

Cross-examined: I know it was the day, because of a young lady being confined the day before of a black child. I went to see it on the 17th, the day the prisoner came.

Joseph Wardle: I am a tin-man at Great Horton. Bradford fair is held about the 17th of June. The prisoner came to me on the 14th, and said he wanted a tube made of tin, about seven inches long, three-quarters of an inch in diameter at the narrow end, and one inch and a quarter at the wide end. He said it was for an operation. I said he would want it middling smooth, and he said he would. He stayed while I made it, and took it away. I never worked for him before.

Mr. William Parkinson: I am a Surgeon, and have been in practice in Bradford about fourteen years. I have been four years Surgeon to the Bradford Infirmary. I was called to make an examination of the body of Martha Curtis, and

was assisted by Mr. Terry. When the coffin was opened and the grave-clothes taken off, the first thing that we noticed was a plaster placed upon that part of the body where the injuries were likely to have been caused. We opened the stomach; it was empty. The breasts were enlarged. The ring round the left breast was dark and the follicles distinct, which are indications of pregnancy. On removing the plaster there was a slight discharge. The peritoneal coats of the intestines were inflamed. Various marks were found of recent delivery, and our opinion is that she had been delivered shortly before death. There was nothing in the formation of the deceased giving rise to the necessity of premature delivery. The cause of her death was peritonitis. There were no signs to enable a Medical man to speak with certainty as to the cause of the peritonitis. I can speak with certainty to her having been delivered shortly before death—I think within four or five days. The use of a wire to procure abortion in the manner above spoken to at six months would be likely to produce peritonitis. Premature labour at six months is not generally followed by this complaint. If a puncture of the membranes had been followed by prolonged labour, it would be likely to be followed by peritonitis. A puncture effected by a Medical man would not be discoverable after death. I found no traces of diarrhœa or constipation, which I am sure those diseases would have left. If the deceased had suffered for nine days from constipation I should have expected to find entirely different symptoms. There were no symptoms of enteritis, but it might be mistaken for peritonitis without a careful examination.

Cross-examined: I discovered no trace of delivery having been caused by instruments, or any other than natural means. She might have delivered herself. There were no certain indications of the age of the child, and it might have been small, though fully matured. Decomposition enlarges the breasts. There may be a dark ring and follicles visible without the condition of pregnancy. [A great number of questions were then put with a view to show that the appearances presented by the remains of the deceased might have been caused by ulcers, hydatids, and other diseases.] Premature confinements are very common, and may be induced by constipation of the bowels and the medicines given to remedy that. Constipation may cause enteritis, which might produce peritonitis, and that, in turn, premature delivery and death.

Mr. John N. Terry: I am a Surgeon, practising at Bradford. Judging from the post-mortem examination, I was of opinion that peritonitis was the cause of death, and I thought there had been recent delivery, but I could not swear that such had actually taken place. If there had been delivery, the peritonitis may have preceded the delivery, or the delivery the peritonitis. There were no indications whatever of the peritonitis having been caused by improper means. The symptoms enumerated coincide with delivery, but there are cases on record where they are caused by tumours, moles, or hydatids, and therefore I am not able to give an opinion.

Mr. Bliss declined to cross-examine this witness, and said he might almost appeal to his learned friend himself whether he could expect anything but an acquittal on his own evidence.

Mr. Price said he was bound to prove two things—that the woman died from improper means, and that those means were used by the prisoner. He felt that the Medical evidence failed to establish the first step, and he was, therefore, not disposed to persevere with the case.

The learned Judge, acceding to that course, directed the Jury that, unless they held a decided opinion that enough had been proved to make it worth while to persist in the inquiry, they should find a verdict of acquittal.

The Jury, after a minute's consultation, said that the Medical evidence had failed to satisfy them of the cause of death, and acquitted the prisoner.

Mr. Price then said that, with regard to the second charge, of making a false certificate as to the cause of death, he felt that the Medical testimony already given placed him in the same difficulty that he had experienced in the first case. He would therefore decline to offer any evidence on that charge, on which also an acquittal was taken, and the prisoner was then discharged.

THE MURRAY AND ROBERTS CASE.

Medical questions of great interest arise out of the now famous encounter in Northumberland-street, which appears the most horrible and inexplicable case out of the whole epidemic of homicide which is at present upon us. Let us just give Mr. Canton's description of the injuries sustained by Mr. Roberts, the bill discounter, who died in the Charing Cross Hospital:—

"I first saw deceased about one o'clock on Friday, July 12. I examined the injuries, which consisted of thirteen scalp wounds, chiefly on the right-side of the head. The temporal artery was divided. I made a post-mortem examination on Friday last. I found the scalp-wounds as they have been described. A small quantity of blood was in a few places diffused beneath the scalp-wounds. The right temporal muscle was in part reduced to a pulp. Beneath it was a fracture of the right temporal bone. This fracture extended to the lowest part of the temporal region, and continued across the roof of the orbit, which it had fractured into four or five pieces of the same size. From the edge of this orbit the fracture passed into the frontal bone, in a situation where it was discovered on the first examination of the patient. On the left side of the head a fracture was also found, on the left temporal region. From this spot I had removed four pieces of bone, which were undepressed, and which I had found in this situation and in this condition during the life of the patient. From this spot the fracture extended through the roof of the left orbit. This fracture was also comminuted. The cheek bone of the left side was broken. Upon removing the skull cap the membrane of the brain beneath was found to be congested. A clot of blood of the size of a shilling was found lying between the membrane and the bone beneath the fracture already mentioned on the right side of the forehead. A clot of blood was also found between the membrane and bone, and sub-adjacent to the fracture already mentioned in the right temporal region. Upon the removal of this membrane from the brain, the surface of the hemisphere of the globes of the brain was found covered to slight extent with translucent matter and lymph. The substance of the brain in the left temporal region was soft and pulpy, whilst the membranes covering it were dark and discoloured with blood.

"Coroner: What was the cause of death? Witness: He died from the result of injuries done to the head and its contents—to none of them particularly, but generally. I should think the wounds had been caused by weapons of some description.

"Coroner: What kind of weapon? Witness: Blunt weapons. There are no incised wounds, each blow was distinct from its fellow, and I should think each wound was the result of a separate blow.

"By Mr. Sleigh: The wounds being lacerated and contused leads me to believe they were inflicted by some blunt instrument. I don't think the lacerated wound between the thumb and finger was caused by a poker. It must have been done by something sharper—something that would tear. The fracture on the left cheek would have made speaking on the part of the patient extremely inconvenient, but he frequently spoke, notwithstanding. At first, before inflammation and other processes contingent to wounds set in, he could speak with comparative facility, but at last there was great difficulty. The clots of blood I have spoken of would cause depression on the brain. The second clot of blood I have referred to was half the size of a pigeon's egg.

"By Mr. Humphreys: Deceased was sensible when I saw him, and continued so until Tuesday last. He talked at times without having questions put to him; but he never volunteered any statement to me respecting the injuries he had received. I think a pair of tongs might have produced the scalp wounds. The wounds on the finger might have been caused by a broken bottle."

Next we may quote the account which Major Murray is said to have given to one of the witnesses of the affray:—

"Mr. Roberts brought out a pistol, and shot me in the back of the neck. I felt a sting, and heard the report. Two or three seconds elapsed, and then I fell with my head close

to the table. He walked away into the other room, and remained some little time. I then felt paralysed, and he came into the room again. I was just grasping the fender to raise my head when he deliberately pointed a pistol, and shot me a second time. He then deliberately stood over me for some time, and I said to myself, 'I will sham dead. He has shot me twice, and if I move he will shoot me again.' I lay for some little time, and Mr. Roberts went into the next room. He came back and looked at me, and then passed towards the window in a diagonal direction. I then raised myself up, grasped at the tongs, and as Mr. Roberts was turning round, I sprang at him, and gave him a blow with the tongs which knocked him down. I then knelt on his chest to hold him down, and Mr. Roberts seized the tongs, and we had a desperate struggle. I thought he was the strongest, and was getting the upper hand of me, when I got a jug and threw at him. I then turned myself round when I saw some beer-bottles. I seized one, and beat and battered him about until it broke. I seized another one, and served him in the same way. I held him by the left hand and beat him with the right. Roberts then released the tongs, and I beat him over his wrist and hands, and, thinking I had quieted him, I got up, but Mr. Roberts again rushed at me. We had another struggle together, and I forced him into the front room, and closed the folding-doors. I then rushed to the window, threw it up, and called to two men who were in the yard, 'For God's sake come to my assistance, for I am being murdered!' "

The account which the Major gave to one of the nurses is said to be "more savage."

"Thus the Major said that he beat deceased about the head with the bottles until he was stunned and fell under a table. He then tried to beat him as he lay on the ground, but the tongs were too long, and they caught in a table and broke it. He then tried to hit deceased on the head, but he could not, as the table sheltered him, so he beat him about the back of the neck and shoulders with the tongs."

The unfortunate Roberts is stated to have persisted in saying that Major Murray shot himself.—

"Murray shot himself in the neck, and then attacked me with the tongs like a demon, and hit me with a glass bottle."

A Medico-legal question here arises, Did Murray shoot himself? If Roberts shot him, what were the respective attitudes of the combatants at the time? Here Mr. Canton's evidence corroborates the Major's statement :—

Mr. Canton described the nature of Major Murray's wounds. He said the place round the wound in the neck was discoloured by gunpowder, and the hair of the head and whisker was singed. In the centre of this black mark was a wound almost opposite the fourth spinal bone of the neck. In front of the right ear was a lacerated and contused wound, about a quarter of an inch in length, but only skin deep. On the front part of both legs were slight contusions; that was all. He probed the chief wound, and found it led into the substance of the neck. At the bottom of it was the bullet, resting on the spine, and he had some difficulty in extracting it. It was deeply grooved, and the mark was recent where it had struck against the vertebræ. The direction of the wound was from right to left, and downwards. A person would have very considerable difficulty in inflicting such a wound on himself, though it would still be possible. It would certainly be impossible with a long pistol, though it might with a short one. The slight wound he had mentioned might have been produced by a firearm. From the mark on the neck of Major Murray it was evident that the muzzle of the pistol was pressed close to the skin before it was fired. From the nature of the wound it did not seem likely that it could have been done in a struggle by a person defending himself from attack. According to witness's theory, the appearance of the wound was quite in accordance with Major Murray's account of how it was received. Had it been received when the parties were standing struggling, it would doubtless have gone in an upward direction. It would never have entered his thoughts to imagine that such a wound would be inflicted by one intending suicide.

Inspector M'Kenzie was here recalled, and stated that Major Murray was a tall man, and Mr. Roberts much shorter.

Mr. Canton continued his evidence, and said that, after hearing that statement as to the relative heights of the parties, he was certainly of opinion that, had the shot been fired while they were both standing and struggling, the bullet could not have taken a downward direction.

To add to the mystery of the case, a bloody (?) razor and quantity of bloody linen were found packed away in Roberts's room. But Mr. Canton

"Examined the razor found in the cabinet, and did not think the blood-coloured fluid on it was really blood at all. It seemed a sticky substance, more like red currant jelly, but it would be impossible to say whether it was blood or not without a minute microscopic examination."

Nothing that can tend to throw light on the *causes* of the affair is yet made public. Whether Major Murray and Roberts knew each other or not previously, is sworn to as a fact by one, and denied on oath by another, witness. Rumour says, that Roberts had been cheated and dishonoured by a man calling himself Major Murray, and that erroneously believing this Major Murray to be the culprit, he had enticed him in, and attempted to take his revenge.

OBITUARY.

FRANCIS RYND, ESQ., A.M., F.R.C.S.I.

Scarcely has one vacancy in the Surgical Staff of the Meath Hospital been filled up, when another has occurred as suddenly and unexpectedly as the last. In the present case the melancholy event took place under circumstances of excitement, which probably by a little hastened the catastrophe. On the evening of Friday, July 19, Mr. Rynd was returning to town, from dining with his family in the country, and, as was his custom, was driving his phaeton himself. On arriving at the Crescent on the Clontarf-road, his servant heard him utter two or three shouts, as if to warn some one out of the way, and, on looking, saw a man raising a woman. Mr. Rynd, having ascertained that the latter was not much hurt, attempted to go on, but his phaeton was stopped by some men, and a dispute ensued, when Mr. Rynd ordered his servant to go for the police. From the evidence of Mr. Hans Powell, a Medical student, who happened to be passing, it appears that the men attempted to go away, but that Mr. Rynd turned his horse to follow them, in order to get them to remain until the arrival of the police; he was then seen to fall forward on the splash-board, his hat fell off, and the horse ran away. On the vehicle being stopped, Mr. Rynd was found to be in a state of coma, he was then driven to Dr. Faussett's, at Clontarf, but was dead before he reached the house. A post-mortem examination was made next day by Dr. Faussett, assisted by Surgeons Smyly and George Porter, when it was ascertained that the heart was in a state of extreme fatty degeneration, and that the kidneys also were diseased.

Mr. Rynd was, in point of seniority, the second of the six Surgeons attached to the Meath Hospital and County Dublin Infirmary. He was apprenticed to the late Sir Philip Crampton, Bart., in 1818, and in 1835 was elected to the Hospital in the room of the late Professor Macnamara. He was for some time Medical Superintendent of the Mountjoy Convict Prison, but had resigned the appointment a few years before his death. On the death of Sir Henry Marsh, he was appointed a Member of the Board of Superintendence of the Dublin Hospitals. He was the author of a work on "Stricture and other Diseases of the Male Urethra," and of several contributions to the Medical Journals. His death is the fourth which has occurred among the Surgeons of the Meath Hospital within the space of three years, one month, and a few days, and of the four who have thus been removed, the last three, Mr. Ledwich, Dr. Porter, and Mr. Rynd, died quite suddenly. Mr. Rynd enjoyed a very extensive practice.

At the Annual Meeting of the Members of the Jersey Medical and Surgical Society held in the Society's rooms on Monday, July 15, the following office-bearers were elected for the ensuing year :—*President*—Dr. J. Fixott. *Vice-Presidents*—Dr. Charles Vaudin and Michael Blood. *Treasurer*—Dr. Alfred Godfray. *Secretary*—H. J. Hirschberg. *Council*—John Le Cronier, Alexander Low, Elias Marett, Freeman Padmore, Alexander Leigh, Martin Bull, and Joseph Dickson.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following are lists of candidates who passed the late M.B. Preliminary Scientific Examination :—

First Division.

Axford, W. H.. King's
Bruce, A., University
Carter, W., Charing-cross
Casey, E., King's
Cass, W. L., Guy's
Clarke, J. St. T., Guy's
Deas, P. M., Univ. of Edin.
Edis, F. P., Westminster
Gervis, F. H., St. Thomas's
Godrich, H., adjoining St. George's
Harries, G. H., King's
Hicks, J. W., St. Thomas's
Hinds, J., Queen's, Birmingham
Hingston, C. A., St. Bartholomew's
King, G., London
Leech, D. J., Royal Manchester School of Medicine
Ludlow, E., St. Bartholomew's
Morton, J. St. Thomas's
Oliver, G., University
Phillips, J. J., Guy's
Pitt, C. W. Middlesex
Powell, R. D., University
Pye-Smith, P. H., Guy's
Richards, F. W., Winchester
Rickards, W., University
Smith, W. F., Guy's
Stevenson, T., Guy's
Taylor, S. T., King's
Walker, G. E., University
Wesley, J. S., King's
Wood, J. H., King's.

Second Division.

Barnes, E. C., St. George's
Bingley, W. P., University
Brook, C., St. Bartholomew's
Brown, A. G., Guy's
Browne, E. A., Charing-cross
Buckmaster, C. A., King's
Burnard, C. F., St. Bartholomew's
Carreg, G. L., Queen's, Birmingham
Coathupe, C. T., Bristol Infirmary
Compson, J. C., Univ. of Edin.
Corbin, T. W., St. Bartholomew's
Dawson, F., London
Eccles, G. H., St. Bartholomew's
Ferris, J. S., King's
Fox, E. L. H., University
Gwyther, J., Owen's
Jackson, T. C., King's
Makens, J., Guy's
Marsh, F. H., St. Bartholomew's
Mickley, A. G., Guy's
Norton, A. T., St. Mary's
Nunneley, J. A., Leeds School of Medicine
Rawlins, W. P., University
Rogers, W. M., University
Southam, G. T. M., St. Bartholomew's
Squarey, C. E., University
Thorne, R. T., St. Bartholomew's
Waters, J. M , University
Wearne, V., St. George's.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At the Comitia Majora held on Friday, July 19, Walter Moxon, M.B., Finsbury-place, having undergone the necessary Examination, was duly admitted a Member of the College.

At the same Comitia the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine and Midwifery, were duly admitted to practise Physic as Licentiates of the College :—

Day, William Henry, M.D., Newmarket
Davidson, Nathaniel, Charles-street, Manchester-square
Folkes, William, Dukinfield
Freer, John Henry, Rugeley, Staffordshire
Hewlett, Richard William, Harrow
Howitt, George Enoch, Wednesbury, Staffordshire
Moore, George, Hanley
Pratt, Thomas Octavius, Cardiff
Squire, William, Orchard-street, Portman-square
Starling, John, Bishop Stortford
Worts, Edwin, Colchester.

The following gentlemen passed the first part of the Professional Examination for the Licence on the 12th inst :—

Rickards, Walter, University College Hospital
Rix, Samuel Babût, Middlesex Hospital
Roberts, John, University College Hospital
Smith, Edward, St. George's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (a).—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 24th inst., and when eligible will be admitted to the Pass Examination :—

Bandernayke-Dias, A. W.
Barnes, T. H.
Brown, J. H.
Costin, J. L.
Conolly, Joseph
Craister, T. L.
Evans, J. B. M.
Giddings, W. K.
Harvey, J. S.
Hills, Rowland
Holm, John
Jeffrey, Joseph
Kennedy, John
Lewis, Alfred
Mason, Samuel
Nickols, Thomas
Nutt, Horace
Partridge, T. D'O.
Phillips, J. D.
Ross, D. P.
Russell, W. S.
Smith, J. B.
Smith, W. J.
Stowell, Thomas
Turner, William
Wall, George

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, July 18, 1861 :—

Bond, Charles Radcliffe, Queen's-road, Dalston
Glover, John, Dorrington
Jones, Morris, Aberystwith
Jones, Richard Owen, Bala, Merionethshire
Nowell, Arthur Henry, Richmond
Stamper, James Fenton, Haverfordwest
Stokes, William, Willoughby, Leicestershire.

The following gentlemen also on the same day passed their First Examination :—

Anstey, Abraham Tidbauld, St. Bartholomew's Hospital
Davies, Lloyd, Upper Eaton-street, Pimlico
Humphry, Charles H., St. Bartholomew's Hospital
Knight, William Henry, Prospect-house, Wittesham, Kent
Morgan, Edward, Easton-street, Clerkenwell
Osbaldeston, Lyttleton F., Middlesex Hospital.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

APPOINTMENTS.

KING.—Dr. King has been appointed Consulting-Physician to the Sussex County Hospital, Brighton, on resigning as Physician.

MOON.—Henry Moon, M.D. St. Andrews, M.R.C.P. Lond., has been elected Physician to the Sussex County Hospital, in the room of Dr. King, resigned.

POWELL.—Robert Hutchinson Powell, M.D. Univ. Lond., M.R.C.P. Lond., M.R.C.S. Eng., has been unanimously elected, by a Special General Meeting of the Governors of the Chester General Infirmary, an Honorary Physician, in the room of Dr. Richard Phillips Jones, resigned.

SEYMOUR.—Almeric W. Seymour, M.D. Edin., M.R.C.P. Lond., B.A. and M.A. Cantab., has been elected Assistant-Physician to the Sussex County Hospital, in the room of Dr. Moon, who has been elected Physician.

SWAYNE.—Joseph Griffiths Swayne, M.D. and L.S.A. Lond., M.R.C.S. Eng., has been appointed President of the Bath and Bristol Branch of the Provincial Medical Association for the ensuing year, in succession to Mr. Soden, of Bath.

THWAITES.—Mr. John H. B. Thwaites has been appointed Dentist to the Bristol General Hospital.

WATTS.—George Watts, L.S.A. Lond., has been appointed Medical Poor-law Officer for the third District in the Newbury Union, Berks, vacant by the resignation of Mr. G. H. Watts.

DEATHS.

BABBAGE.—July 17, at Bishops Tawton, Devonshire, William Berry Babbage, late of Bengal-place, New Kent-road, M.R.C.S. Eng., aged 27.

BAYNE.—July 19, at Aberdeen, Dr. Ronald Bayne, Bombay Medical Service, aged 40.

BUCKLAND.—July 17, George William Buckland, of Osborne-house, Sunbury, Middlesex, formerly of Shaftesbury, Dorsetshire, M.R.C.S., Eng., L.S.A. Lond., aged 64.

BURKE.—July 18, at Outerard, Ireland, Martin J. Burke, M.D., late Staff Assistant-Surgeon, Army, aged 25.

GREENHOW.—July 14, at Humshaugh House, Northumberland, Edward Greenhow, M.D., Fellow of the Royal College of Physicians of Edinburgh, aged 71.

MATTHEWS.—July 23, Thomas Leman Matthews, of Orsett-terrace, Hyde park, Fell. and M.R.C.S. Eng., L.S.A. Lond., late of the Hon. East India Co.'s Madras Army, aged 62.

MIRFIN.—Recently, Henry Walker Mirfin, of Stainforth, Doncaster, Yorkshire, M.R.C.S. Eng., L.S.A. Lond.

PARKER.—May 12, at Windsor, New South Wales, Robert Parker, late of Glasgow, Scotland, M.D. St Andrews, L.F.P.S. Glasg., F.F.P.S. Glasg.

PENKIVIL.—July 16, John Penkivil, of Yeovil, Somersetshire, M.D. Edin., aged 79.

SOUTH.—July 20, of scarlatina, Charles South, L.A.H. Dublin, Resident Apothecary at the Poor-law Union Dispensary, Summerhill, Dublin.

THE ELECTRIC LIGHT.—The electric light, which is now used to illuminate the Place de Palais Royal, Paris, has lately been subject to remarkable changes in its brilliancy, arising from a very singular and unexpected cause. Every evening—and especially after a very warm day—clouds of insects collect around it, and each of them appears to be drawn irresistibly towards the bright points of burning carbon; but the instant they touch it they are broiled to death. The numbers that crowd to it, however, are so enormous that the light appears at times to be almost extinguished by burning insects, and every morning the bodies of these unfortunate suicides are found heaped up at the bottom of the lantern in thousands and tens of thousands. But as an ingeneous French *savant* has luckily discovered a new method of keeping insects out of lanterns this cause of the discontinuance of the electric light will very soon be put an end to.—*Mechanics' Magazine.*

EXTRAORDINARY CASE OF BODY-SNATCHING.—On Tuesday last considerable sensation was created in Wrexham by the apprehension of four persons for attempting to remove a body from a grave in the church burial ground. The prisoners were Mary Barry, Cornelius Quin, Robert Manning, and William Manning. The first named was apparently suffering from some mental derangement. She was under the delusion that her deceased son could not rest in an English burial ground, and wished to remove him to one in Ireland,

to lay him, as she expressed it, "by his father's side." The three men, for some pecuniary remuneration, had undertaken to assist her, and, had it not been that they were disturbed by a person passing, they would have been successful in completing their disgraceful engagement. A witness stated that he was passing the graveyard about two o'clock on Tuesday morning, when he heard a noise within. Shortly after he saw some men come over the wall, and walk in the direction of the town. On going into the burial ground a grave was found about half open. The coffin was not removed. When the female prisoner was taken into custody a rope, an iron chisel, and a large box were found in her possession. The prisoners, with the exception of Quin, admitted the charge, and, as Quin had been sworn to by a witness, they were fully convicted. Mary Barry was committed for three months, Quin for two, and the Mannings for one month.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 20, 1861.

BIRTHS.

Births of Boys, 905; Girls, 914; Total, 1819.
Average of 10 corresponding weeks, 1851–60, 1574·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	592	579	1171
Average of the ten years 1851-60	551·5	510 3	1061 8
Average corrected to increased population..	..	..	1168
Deaths of people above 90	..	1	1
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,269	1	8	2	3	7	5	19
North ..	618,181	1	6	5	1	10	10	28
Central ..	377,794	..	4	7	2	6	5	22
East	570,898	1	2	5	3	16	5	32
South ..	772,892	1	6	8	2	18	5	35
Total.. ..	2,803,034	4	26	27	12	57	30	134

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 574 in.
Mean temperature	61·3
Highest point of thermometer	75·3
Lowest point of thermometer	48·8
Mean dew-point temperature	55·3
General direction of wind	S.W.
Whole amount of rain in the week	1·40 in.

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NOTES, QUERIES, AND REPLIES.

"He that questioneth much shall learn much."—*Bacon.*

R. B., Loodianah.—The list of subscribers to the Medical Benevolent College is only published in the Annual Reports of the College.

Mr. Moore's account of the Accident on Mont Blanc is unavoidably delayed until next week.

Mr. Legg.—Next week.

Students.—"Laycock on Mind and Brain."

Dr. K.—We do not insert marriage lists. Many thanks.

Hahnemann's Organon.—A Constant Reader is referred to Devrient's Translation, published by W. F. Wakeman, 2, D'Olier-street, Dublin. 1833. Sections xlviii. and li., pp. 144 and 145.

Dr. William Foley, of Kilrush, is good enough to communicate an account of the finding of a living mollusk, resembling a common periwinkle, in a cavity the size of a teacup in a large block of limestone. Dr. Foley had not the good fortune to see the animal in its living condition, and has probably not been able to determine the species, which it would be interesting to know; because, if the creature be of a recent species, it probably got washed into a crevice of the rock at no distant period, and has not been imbedded so many thousand years as seems to be imagined.

Scrutator tells us that in driving the other evening from Richmond to Putney, he observed a bit of ground covered with heaps of road-scrapings and other disgusting rubbish, and on inquiring into the cause of this contamination, received for answer, "Oh, Sir, they are preparing the ground for building"!

Erratum.—Page 77, col. 1, line 9 from top, *for* "quantitatively" *read* "qualitatively."

A Query.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Any of your readers will render me very great aid if they will kindly favour me with the address of the Secretary or Matron of the Sanatorium, established exclusively for the reception of the wives and children of Medical men. I think it is in or near Brighton.

I am, &c. Pulmonary.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If your correspondent 'Αγαπη would write to Mr. Hall, Secretary, the Lunatic Asylum, Lincoln, he would probably receive a satisfactory statement of terms on which his patient might be received.

I am, &c.

July 24. 'Ελπις.

COMMUNICATIONS have been received from:—

Professor Simpson; Professor Graham; M. Claude Bernard; Dr. R. Lee; Dr. Anderson; Dr. Peacock; Dr. Carey; Mr. Ridgway; Dr. Metcalfe; Mr. Moore; The Marquis of Chandos; Dr. Reeves, Melbourne; Registrar-General; Mr. Symmons; Dr. Seward; Dr. Hillier; Dr. Fowler; Mr. Bowen; Dr. Knox; Mr. Atkinson; Mr. Legg; Studens; Dr. Monckton; Dr. Watson; Dr. Corfe; Mr. Hainworth; Mr. Wadham.

APPOINTMENTS FOR THE WEEK.

July 27. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

29. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

30. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

31. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

August 1. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

2. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 o'clock:—

By Mr. Holt—For Stricture of Urethra.
By Mr. Holthouse—For Femoral Hernia (Radical Cure).
By Mr. Hillman—Amputation of Leg; for Necrosis of Elbow-joint.

ORIGINAL LECTURES.

LECTURES ON THE SPINAL CORD,

DELIVERED AT

The College of France,

DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,

Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture XIX.

ON THE VARIOUS DEGREES OF EXCITABILITY EXHIBITED BY THE NERVOUS SYSTEM.

Summary: Incidental Remarks on the Degeneration of divided Nerves—All Tissues liable to be transferred from a state of Rest to a state of Activity, and *vice versâ*, through the Influence of the Nervous System—The same Tissues, however, exhibit very different Degrees of Excitability in various Individuals—Such is probably the Source of the principal differences between the Species which occupy various Ranks in the Animal Scale—In all Animals which possess a given Tissue, this Element always retains its Characteristic Properties—The Variations of Excitability in different Kinds of Animals can hardly be greater than those met with in the same Individual during Abstinence, and after a Meal—Application of these Views to Medicaments and Poisons—Some Poisons are supposed not to act upon certain Kinds of Animals: this Opinion is erroneous.

Gentlemen,—The modifications which take place in the different orders of nerves after they have been divided, have often been alluded to in this course; and we promised to give you a practical illustration of the results to which the researches of various authors have led. We killed this morning the dog which was brought before you a few days ago, and which, in the earlier part of this course, had been employed for the demonstration of recurrent sensibility in motor nerves. In this animal, which had perfectly recovered, the anterior and posterior roots of two nervous pairs had been divided. The autopsy being made immediately after death, we found that the anterior roots still retained their usual size and appearance; while the posterior ones were shrivelled up, were become opaque and of a greyish colour, and had completely lost the transparent whiteness of sound nerves. On examining these nervous trunks under the microscope, we ascertained that the central extremity of the anterior roots was composed of ordinary nervous tubes, containing, as usual, a cylinder-axis (or primitive band) and an oily transparent fluid; while the posterior roots were totally degenerated, and no longer exhibited the slightest trace of a distinct organisation; and this modification could be traced back to the very centre of the spinal cord, from which they spring. We even believe that this disorganization of the sensitive nerves, when divided, might lead anatomists to settle the controversy on the decussation of fibres in the spinal cord; for on tracing back the degenerate nervous tubes to their primitive extremity, it might be ascertained whether they terminate on that side of the spinal axis from which they apparently emerge, or pass over to the opposite side.

The peripheral extremities of the divided roots being lost, as it were, in an indurated mass of cellular tissue, have not been examined: it would, in fact, have been exceedingly difficult to trace them out; but the results of our personal investigations, as far as the central portion of these nerves is concerned, fully confirms the opinions of the physiologists who have already studied the question: the central portion of sensitive nerves, and the peripheral extremity of motor ones, are atrophied in consequence of the operation. We have, at the same time, verified the observations of certain authors upon the human subject: M. Turck, of Vienna, in making the autopsy of certain hemiplegic patients, ascertained that whenever a nerve degenerates, the disorganization ascends to its origin, within the nervous centres—a remark fully corroborated by our own observations.

Let us now resume our studies upon the influence exerted by the nervous system upon the chief functions of life. All the organs of the body, as you are well aware, are called from a state of rest to an active condition, when a stimulus is applied to the nerves; the reverse is the case when they are divided. But although the nature of the phenomena created in this manner is always identical, their intensity is far from being always the same: it depends upon the degree of nervous excitability possessed by the subject in each particular case. Such, no doubt, is the principal cause of the physiological differences which exist between the various species of animals, or between animals belonging to the same tribe; the same individual when compared to himself offers important variations in this respect; have we not seen that, during abstinence the pneumogastric nerves are almost totally insensible, while after a meal this sensitiveness grows intense? The differences which exist between various kinds of animals are hardly more extensive than those which the same animal exhibits during abstinence and digestion. It must, therefore, be understood that the properties of any given tissue remain invariably the same throughout the scale of being, and only disappear in those tribes in which the tissue itself ceases to exist.

The application of these views to the action of medicines and poisons will, we believe, explain the greater or lesser intensity of their effects; these agents, as you are aware, exert their influence upon the histological elements of our tissues; but some poisons appear to be fatal to certain tribes of animals, and innocuous to the rest. We can only consider this as the result of a lesser degree of excitability in the tissues of certain animals; for we cannot admit that a substance like upas, which kills the muscular fibres, does not act indiscriminately upon all kinds of animals.

We have already met with an opportunity of discussing this point, with reference to the American arrows, which M. Boussingault placed at our disposal, and which we believe to be impregnated with the venom of toads. We showed you, on this occasion, that this substance is fatal to the animal which secretes it, although its action is less powerful upon the toad than on other species; the frog, for instance—a difference which coincides with the lower degree of muscular irritability in the former animal, a much stronger galvanic current being required to produce contractions in toads than in other batracians.

It is likely that the immunities which various animals are believed to possess with reference to certain poisons might also be explained by physiological causes. It has been asserted, for instance, that the hedgehog is not poisoned by prussic acid; but the accumulation of fat under the animal's skin (at a certain season of the year) does not allow this substance to come within the reach of the absorbent vessels, when injected under the skin; when it has really been introduced into the blood, death almost instantaneously follows.

It has also been asserted that hogs are not injured by the bite of venomous serpents; the viper, in our own climate, and the rattle-snake, in the New World. But for motives similar to those just alluded to, the venom is deposited in the cellular tissue, where its presence is unattended with any serious inconvenience; while, if the serpent's fangs have reached the vessels, the usual effects of its bite are speedily observed as in all other species. Such is the case even in the porcine tribe, when the individual happens to be lean.

It has also been stated that sheep could not be poisoned with arsenic, and that enormous doses of this substance (30 grammes, or 540 grains) produced no effect upon them. In a report read before the Academy of Sciences, Magendie showed that when the stomach of the animal is empty, the poison acts in the usual manner; but that in the cases which had been related, they had abundantly partaken of food, and that even a large dose of arsenic, when mixed up with an enormous mass of half-digested grass, would pass through the intestinal tube without being absorbed. The fact mentioned by Corvisart, which we recorded in one of our preceding Lectures, offers some analogy with the present case.

There exist, however, certain substances which, however injurious to certain individuals, are not always equally noxious in all cases; they might not inaptly be called "false poisons," for their effects do not immediately attack the springs of life; they operate, as it were, in an indirect manner. Such is the case with poisonous mushrooms, which are not, in reality, to be viewed as toxic agents, but give rise to acute inflammations of the stomach and bowels, which sometimes prove mortal. Notwithstanding, therefore, the fatal effects which they produce in some animals, we need not be astonished to see other kinds of animals escape un-

harmed, the power of vomiting being denied to certain species (the horse), while others eject offensive substances from their stomach with the greatest facility; in this latter case these irritating bodies do not remain in contact with the intestinal mucous membrane so long as to inflame it. Death, in fact, is often produced by the action of substances which although totally deprived of poisonous properties, disorganize the tissues which lie in contact with them. Half a glass of boiling water injected into a dog's stomach, causes it to die in a few minutes, after vomiting an abundance of blood; and we do not hesitate to range under this class powerful acids and alkalies, together with all compounds which, not being possessed of deleterious powers on histological elements, cannot, in our opinion, be viewed as real poisons.

In short, gentlemen, the properties of organic as well as inorganic matter are due to its structure and chemical composition, and, in the whole animal series, the histological element is invariably affected in the same manner by a given agent. The differences met with in various tribes, appear, therefore, to be derived from the peculiar properties of the nervous system.

ORIGINAL COMMUNICATIONS.

NOTES ON THE

TREATMENT OF DELIRIUM TREMENS

BY LARGE DOSES OF

TINCTURE OF DIGITALIS.

By THOMAS B. PEACOCK, M.D., F.R.C.P.
Physician to St. Thomas's Hospital.

During the last year, Mr. Jones, of the Jersey General Hospital, gave an account of his method of treating delirium tremens by large doses of digitalis; and shortly after, Mr. Whitfield made trial of the plan at St. Thomas's Hospital. As two of the patients so treated were under my own care, and I had the opportunity of watching the progress of two others, I propose in this paper to offer some remarks on this mode of treatment. I have since found that Dr. Goolden had previously employed the same treatment.

The employment of digitalis in the treatment of nervous affections, is, I need scarcely say, by no means novel. In 1785, Dr. Withering, to whom we owe the knowledge we possess of the emeto-cathartic and diuretic action of digitalis, and of the depressing influence which it exercises on the heart and arteries, referred to cases in which the remedy had been found useful in epilepsy, hydrocephalus, and insanity; but ascribed its beneficial operation to its having aided in promoting the absorption of serous effusions.

In 1795, Dr. William Currie, of Chester, induced by the powerful sedative action in the nervous system which the drug was known to produce, was led to employ it in a case of mania in a lady, which had resisted all the ordinary means. He exhibited it in "a pretty full dose," so as to produce "languor, sickliness, and considerable irregularity of pulse," and found that it induced "calmness, which was soon followed by sleep;" and the improvement being maintained, he directed five grains of the powdered leaves to be given occasionally upon any considerable increase of irritation or restlessness at night, and the patient ultimately completely recovered. He adds that there were no symptoms of dropsy, so that the beneficial effect could not be explained in the way supposed by Dr. Withering. He subsequently employed the remedy in epilepsy.

The experience of Dr. Currie as to the usefulness of digitalis in mania, did not correspond with that of Dr. Senior; but it was subsequently confirmed by Dr. Hallaran, and the remedy has since that time been frequently used by practitioners in the treatment of various forms of nervous disorder. It has also been occasionally employed in doses quite as large as those recommended by Mr. Jones. Dr. Currie having given the digitalis so as to produce the full effects of the drug, cannot be supposed to have used small doses, and since that time very large quantities have occasionally been taken, either accidentally or intentionally.

In 1822, Dr. Fogo related the case of a gentleman in advanced life, who before an attack of pneumonia became subject to violent asthmatic symptoms, which resisted powerful doses of anodyne and entirely prevented his resting at night; he had also some œdema of the ankles. One morning, after a night of great suffering, he took by mistake a full ounce of tincture of digitalis, soon after fell asleep, slept for some hours, and awoke feeling quite easy. His pulse, however, became occasionally intermittent, and about twenty hours after the dose was taken, sank to forty-one. He rallied under the use of diffusible stimulants, had entirely overcome the effects of the drug in about thirty hours, and got quite well.

In 1827, Mr. Scott of Liverpool, related the case of a boy 9 years of age, who, during infancy, had chronic hydrocephalus, and at the age of five became subject to epilepsy. While under treatment with small doses of tincture of digitalis, he one day, in the absence of his mother, got access to the bottle, and took between two and three drachms. This produced vomiting and faintness, which were relieved by opium and brandy, and from this time the fits became less severe. They frequently occurred during the night, and when the boy was threatened with an attack, his mother used to give him a teaspoonful of the tincture, which generally warded off the fit, and under this treatment he greatly improved

According to the report of Dr. Clutterbuck, Mr. King, of Saxmundham, was in the practice of giving very large doses of tincture of digitalis as a sedative in cases of inflammation, with or without the use of depletion. The dose given to an adult was half-an-ounce to an ounce, and if, at the end of twenty-four hours, the pulse was not reduced or rendered irregular, it was repeated, and he had given as much as two drachms to an infant of nine months. Dr. Clutterbuck himself, in two or three instances, gave half-an-ounce of the tincture, in several cases two drachms, and still more frequently one drachm, in attacks of fever and inflammation, but never more than once in twenty-four hours.

Dr. Pereira mentions that he had seen twenty drops given to an infant labouring under acute hydrocephalus, three times daily, and at the end of a fortnight the child entirely recovered. He had also himself given to adults frequently a drachm of good tincture three times daily, and continued the dose for a fortnight without any injurious effects. It also appears, from notices in the medical periodicals published after the appearance of Mr. Jones's report, that large doses of tincture of digitalis had been given by Dr. Billing and other Practitioners in different forms of disease. So far, therefore, as refers to the employment of the remedy in maniacal affections and to its use in large doses, Mr. Jones had been anticipated, but we are indebted to him for the application of the treatment to delirium tremens—an affection which is, unfortunately, of very frequent occurrence, and which, under the various systems of treatment hitherto employed, has proved a very fatal disease.

I have gone over the records of St. Thomas's Hospital for the last two years, 1859 and 1860, and find that 36 cases (32 males and 4 females) of delirium tremens were under treatment during that time. Of this number 9 (7 males and 2 females) proved fatal, giving the very high rate of mortality of 1 in 4, or 25 per cent. The treatment to which these cases were submitted varied considerably, but consisted generally (in 30 out of 35 cases) in the employment of opiates, solid opium, morphia, the tincture opii, or the liquor opii sedativus, in combination with antimony, ipecacuanha, purgatives, ammonia, ether, and the stronger alcoholic stimulants, brandy and gin, etc. The opiates were, in some instances, several times repeated, but the doses were never very large. In some cases they were exhibited in the earlier, in others at the later periods of the disease, when other treatment of a more or less antiphlogistic character had been previously had recourse to.

The opiate remedies I cannot but regard as often too indiscriminately employed in the treatment of the different cases which are ordinarily described as delirium tremens. If exhibited in small doses they are apt to give rise to excitement rather than to procure rest; and such is a frequent result in certain constitutions and particular states of system, even when the doses are large. When also we consider that in fatal cases of the disease, death is generally preceded by coma and convulsions, and, on post-mortem examination, the brain is usually found much congested, and there is not unfrequently serous effusion beneath the membranes or in the

ventricles, indicating that more or less active inflammation or congestion had existed, the exhibition of large doses of opiate medicines cannot but be regarded as fraught with danger. I find that of the 30 cases in which opiates were given, the mortality was not less than 1 in 3⅓, or 30 per cent.

The use of the stronger alcoholic stimulants in the earlier stages of the disease, also appears rather calculated to increase than to lessen the excitement of the patient. So far as my experience serves me, the symptoms most commonly supervene after a violent or very prolonged debauch, and only rarely from the sudden cessation of the accustomed stimulus. In the former class of cases, then, the exhibition of more stimulus when the blood and tissues are already saturated with alcohol, can only aggravate the evil.

This objection does not, indeed, apply to the use of opiates in moderate doses, and of stimulants, especially the milder alcoholic beverages, when, towards the end of an attack, the patient, who had previously been treated by mild antiphlogistic measures, still continues restless and is becoming exhausted. Even, however, under these circumstances, there are objections to the use of the alcoholic beverages, which should cause them to be avoided, if that can with safety be done, or any substitute can be employed.

It is evident also that the disapproval expressed of the use of opiates in cases of active cerebral excitement, does not apply to the treatment of cases in which the condition of the general system and of the brain is the very opposite to that referred to.

Mr. Jones informs us that he was first led to employ this method of treatment by accident. Some years ago, a patient took an ounce of tincture of digitalis by mistake for a mixture of chloric ether and laudanum, and so far from sustaining any injury from the dose, was relieved by it; and thus directed to the practice he has continued it up to the present time. The best dose, he says, is half-an-ounce of the tincture given in a little water; usually a second is required in about four hours and very rarely a third, but this need not generally exceed two drachms. The largest quantity which he has given, is half-an-ounce at first, a second dose of the same amount in four hours, and a third six hours after the second, or an ounce and a-half in ten hours. The pulse, after the exhibition of the remedy, he informs us, is not lowered in force, but becomes fuller, stronger, and more regular, the clammy perspiration ceases, the skin becomes warm, and sleep ensues for five, six, or seven hours. He has employed the treatment in more than seventy cases and has lost only one in which there was a tumour of the brain, and in only three cases has it been found necessary to exhibit any opiate to obtain sleep. The favourable results of the treatment are confirmed by Mr. Spencer Wells and Dr. Ballard, who witnessed its employment by Mr. Jones, and by Mr. Carr, of Blackheath, who having heard of the plan in 1855, had since adopted it in his practice.

The cases of delirium tremens in which the large doses of tincture of digitalis were used at St. Thomas's Hospital, have been six in number (three only included in the former enumeration), five of these being cases of idiopathic delirium, in which the affection was the direct result of excessive drinking, while in the sixth the disease was traumatic, or supervened in a man of dissipated habits, shortly after he had sustained a fracture of the thigh.

In four of these cases only one dose of half-an-ounce was given; in a fifth, the same quantity was repeated after an interval of twenty-two hours; and in the sixth, the dose first given was only two drachms and half-an-ounce was exhibited after an interval of about twenty-four hours. In two of five cases of which I possess notes, the stronger alcoholic stimulants were given in the earlier periods of the attacks, and in all but one or two, ammonia and bark were prescribed after the digitalis had produced its effects. The ages of the patients treated were 23, 30, 33, 44, and 45. The last patient only was a female, and all recovered.

In no instance were any alarming symptoms of depression induced; but the pulse usually soon fell remarkably in frequency, and acquired greater power and steadiness. The sickness subsided; the tremor became less, and the patient was much quieted. It did not, however, appear that the digitalis directly induced sleep, but it calmed the patient and sleep seemed to ensue naturally, after a longer or shorter interval. The patient did not, however, sleep so soon, so soundly, or for so long a period, as, from Mr. Jones' report, had been anticipated; and in two cases morphia was given before rest was procured; while, in a third, small doses of compound ipecacuan powder were exhibited at short intervals during the attack. This difference may be due to the less liberal employment of the remedy at St. Thomas's. Mr. Jones states that he generally repeats the dose in four hours, and occasionally, in a smaller quantity, for a second time; whereas at St. Thomas's two full doses were only prescribed in one case, and in that instance the second was given after an entire day had elapsed.

The kidneys did not appear to have their action increased by the digitalis; on the contrary, so far as could be ascertained, the flow of urine continued, after the remedy was exhibited, to be only small in quantity.

I would remark that it would be altogether premature to venture a decisive opinion upon the use of the large doses of digitalis in this disease; but the facts seem to warrant the conclusions—

1st. That the drug, when exhibited in full doses, does not by any means produce the amount of depression which our previous experience of its action, in small and frequently-repeated doses, would have led us to expect; and

2nd. That the remedy, in conjunction with other means, may probably be very usefully employed in the treatment of certain cases of the disease, and especially when it occurs in young and robust persons, whose strength has not been broken down by prolonged habits of intemperance; and particularly when it arises as the immediate result of excessive spirit-drinking. Delirium tremens, like other acute diseases, occurs under varied and opposite conditions, and it would be alike opposed to sound theory and practice to extend the same treatment to all cases of the disease.

I have selected two cases to illustrate the views here expressed,—the first is one in which the disease occurred after excessive drinking; in the second, a dissipated man became delirious after having sustained a fracture of the thigh, from being deprived of his accustomed stimulus.

Case 1.—J. T., aged 30, formerly a soldier who had served in North America, the Crimea, and India, and had just returned from Calcutta, was admitted into St. Thomas's Hospital, under my care, on October 14, 1860.

He was received, labouring under symptoms of delirium tremens, at half-past two p.m., and was reported to have taken a quart of spirits daily for several days. At half-past six, when he was in a very restless and excited state, suffering from retching and sickness, and his pulse 103 in the minute, he was directed to have half-an-ounce of tincture of digitalis, and the dose was given in a quarter of an hour. At a quarter to eight the pulse had fallen to 72, and was of good volume, and he was much quieter, free from sickness, and disposed to sleep. At eleven p.m. he was much in the same state; pulse 76 and regular; he had not slept, but was quiet and still seemed disposed to sleep.

At ten a.m. on the 15th he was seen by myself: he was reported not to have slept ten minutes during the night, and had been restless and trying to get out of bed, but not violent. The tongue was dry and a little red, the pulse 80, somewhat sharp, and decidedly resistent. The sounds of the heart were natural, except the second, which was somewhat indistinct. The pupils were large, and not apparently affected by light. The urine deficient in quantity, and high coloured. His manner was hasty, but he spoke quite rationally, and he took his food well. During the evening and night of the same day he slept for a considerable period, and the following morning he was much better. He was quite intelligent, but still had a somewhat agitated manner. The pulse was 80 to 84 in the minute and feeble, and the second sound of the heart was very indistinctly audible. He was directed to have five grains of the sesquicarbonate of ammonia in an ounce and a-half of decoction of bark every three hours.

On the 17th he continued to improve, and on the 18th his appearance and manner were much more tranquil, the tongue somewhat dry and slightly furred; the bowels regular; pulse 80. He had made water freely, but said that the quantity was less than usual. He was directed to have the quinine and iron mixture three times daily and the mixed diet. To be allowed to leave his bed. When up there was a considerable increase in the frequency of the pulse—greater than was perhaps explained by his general state—in the bed it beat steadily 80 in the minute, when sitting up it was 100, and was more irritable

and feeble, and when standing it became 120, very sharp and feeble.

He was presented and went out cured on the 20th.

During the period of his residence in the Hospital he was not allowed any stimulus.

Case 2.—S. S., aged 44, a waterman, admitted into St. Thomas's Hospital on October 15, 1860, under the care of Mr. McMurdo, after having sustained a fracture of the thigh from a fall. On the 18th he began to have symptoms of delirium tremens, and had become very violent when, at 4·45 p.m., a dose of 40m of tincture opii was given to him. At 10·30 p.m. the laudanum was found not to have had any soothing effect, and his pulse was 120, and ℥ss. of tincture of digitalis was given. At 11·15 p.m. the pulse was still 120.

19th.—At 9 a.m. he was reported to have been violent during the night, but less after taking the dose of digitalis till 4 a.m., when he again became more excited. He had had no sleep during the night, but was then quieter. Pulse 98, quiet, and feeble. 4 p.m.—He had still had no sleep. The pulse was 98, full, and regular. To repeat the dose of tincture of digitalis. 10 p.m.—Has still not slept. Pulse 82, full, and regular. Pupils natural and contractile. He has passed a small quantity of water. He appears disposed to sleep.

20th, 4·30 a.m.—Has still not slept. Pulse 80, regular. He has passed some water, which smells of digitalis To have a glass of gin. 11·25 a.m.—Still no sleep. Pulse 80, irregular, and intermittent. 4·45 p.m.—I saw him with Mr. Whitfield. He had still had no sleep. The pulse was 80 and irregular, and he was much depressed. To have 6 grains of the sesquicarbonate of ammonia in an ounce of decoction of bark every four hours. Two pints of porter in 24 hours. 9 p.m.—Pulse 70, irregular, and intermittent. The bowels have been acted upon. To have 4 ounces of gin and half-a-drachm of the solution of hydrochlorate of morphia and a drachm of aromatic spirit of ammonia directly. 11 p.m.—Pulse 88, regular.

21st, 10 a.m.—Did not sleep till 5 o'clock this morning. The pulse is now 84, full, soft, regular. The tongue is dry, and he complains of thirst. He has passed water naturally. 9 p.m.—Has slept at intervals and taken his meals naturally, is otherwise going on well.

22nd, 10 a.m.—Has slept during the night. Pulse 80, soft, slightly intermittent. The sesquicarbonate of ammonia every six hours. The full diet. From this time he progressed favourably.

Note.—At the time when the large doses of digitalis were first tried in the Hospital, struck by the very little effect which resulted from the treatment, I suggested to Mr. Whitfield the employment of digitaline; as MM. Homolle and Quevenne, and the reporters on their communication to the Academie de Médecine,—Rayer, Soubeiran, and Bouillaud,—had shown that while capable of producing all the effects of digitalis, the digitaline was much more certain in its action. This suggestion was adopted, and a case was successfully treated by a dose of the active principle regarded as equivalent to the large doses of digitalis, but I have failed to obtain the notes of this case.

In the "Traité de Thérapeutique" of Trousseau and Pidoux, it is stated that each millegramme (·0154 of an English troy grain) of digitaline is equal to 10 centigrammes (·1543 grains troy × 10—1·543) of the dried powder of the leaves of digitalis—thus calculating the digitaline at 100 times the strength of digitalis. By an experiment of M. Henry, quoted by Dr. Pereira, it appears that a given weight of dried digitalis yielded about $\frac{1}{120}$th of digitaline. Taking, therefore, the last calculation as the standard, and estimating the strength of the tincture of the London College as 10m, being equivalent to 1 grain of the powder, it results that $\frac{1}{8}$th of a grain of digitaline is equal to ℥ss of the tincture of digitalis.

This quantity is, however, much greater than that which is ordinarily exhibited, and, so far as I am aware, is larger than has ever been given. Dr. Pereira estimates the dose at $\frac{1}{60}$th to $\frac{1}{30}$th of a grain. Trousseau and Pidoux estimate the dose to be given in twenty-four hours at 2 to 4 or 5 millegrammes—$\frac{1}{50}$th, $\frac{1}{25}$th, or $\frac{1}{20}$th of a grain; and state that some patients cannot take more than 1 or 2 millegrammes, $\frac{1}{100}$th to $\frac{1}{50}$th of a grain, without the depressing action on the pulse, and nausea, griping, sickness, and purging being induced; while others may take 7 or 8 millegrammes, or $\frac{1}{14}$th or $\frac{1}{12\cdot5}$th of a grain.

MM. Homolle and Quevenne, in one case of cyanosis connected with patency of the foramen ovale, gave 9, 10, 11, and 12 millegrammes, the last dose being merely the 5th of a grain. The doses employed by Bouillaud, who has extensively used the digitaline in the place of digitalis, were 2, 3, 4, 5, 6, and 7 millegrammes per day, and these doses he has continued for thirteen or fourteen days. In one case he gave 70 millegrammes in eighteen days; in a second, 82 in fourteen; in a third, 98 in twenty; and in a fourth, 164 millegrammes in forty days, and without any seriously objectionable symptoms being induced. The French writers, however, give the caution that the development of the depression in the pulse and the emeto-cathartic effects, at once indicate the necessity for the discontinuance of the remedy.

They recommend that the digitaline should be given in granules, each containing a milligramme, with a proportion of sugar to mask the extreme bitterness; but in the case in which it was employed at St. Thomas's Hospital in the treatment of delirium tremens the solution was used; and this form is, probably, the better, and certainly the safer mode of exhibition.

REPORT OF A CASE OF EPILEPTIFORM CONVULSION.

DEATH—AUTOPSY—DEPOSIT OF BONE ON THE SURFACE OF THE BRAIN—RUPTURE OF ANEURISM OF THE BASILAR ARTERY—HISTORY OF HYDROCEPHALUS IN EARLY LIFE—CURE BY PARACENTESIS CAPITIS.

By THOMAS B. CROSBY, F.R.C.S. (Exam.)

E. DES F., aged 27, a healthy-looking, athletic Russian, having complained of occipital headache for three days previous, and after a little debauch the previous night, was seized at midday, October 4, with an epileptiform fit. In the fall he bruised his forehead severely. The bystanders placed him in the erect position, and applied the cold douche so freely, that Dr. Sewell, my partner, considered him in danger of death from collapse. He was pale, cold, and pulseless. From this condition he partially rallied on being laid in the horizontal position, and on the free application of external warmth. On my arrival a few minutes afterwards all convulsions had ceased, and his condition was that commonly seen after severe concussion of the brain, and had not Dr. Sewell, who saw him while convulsed, decided on the seizure being epileptic, I should have attributed his symptoms to the severe fall of which he bore such evidence on his forehead. He was placed in a warm bed, and heat was freely applied to the surface of the body and mustard-plasters to the calves of his legs, and as soon as he was able to swallow, a little ammonia was given. I watched him from hour to hour, and in the evening, about twelve hours after the fit, his skin was warm and moist, and he had then no heat of head. His pupils acted rather sluggishly, and he was in a peculiar state of semi-insensibility, turning restlessly over in his bed on attempts to rouse him. He knew no one near him, although he has been out of bed twice to relieve the bowels after a cathartic enema, which was administered four hours previously. Acetum lyttæ was applied to the back of the neck pretty freely, and cotton wool laid over it.

October 5.—He had passed a restless night, and had been out of bed twice to relieve the bowels. He was still confused, recognising nothing, and was very unwilling to be disturbed. Pulse 76; skin cool; head rather hot. I directed that his hair should be removed, and cold be applied to the head. Small doses of calomel and colocynth were given to keep up the action of the bowels.

During the next four days he gradually improved. He had a peculiar vacant look, and a total loss of memory, even of the simplest matters that happened a few minutes before, although his recollection of things that occurred *before the fit* appeared perfect. His special senses and general sensation were unimpaired; his appetite was good, and he complained of being kept from solid food. His tongue was clean and his pulse good, and with the exception of the puffy swelling on

the forehead, from the fall, and the want of memory alluded to, he appeared quite well.

10th.—Six days after the seizure his mouth was a little sore from the calomel. Iodide of potassium in decoction of cinchona was substituted, to keep up absorbent action, as some meningeal irritation was supposed to exist.

11th.—Sitting up, and very anxious to be removed from his temporary abode to his residence at Sydenham, for, since his seizure, he had not been moved from the house in which it took place. He said that he should feel very well except from the confinement to his room. His memory was still defective, though he knew where he was, and conversed freely with his foreign friends in four languages with equal facility.

12th.—Arrangements were this day made for his easy removal the next day. I say easy, because we still feared another fit, as his memory was still much impaired, although in other respects he appeared to be quite well. This evening without sanction, he smoked two or three cigars, in company with his friends, who were spending the evening with him. He had afterwards a restless night, and at about six o'clock on the 13th, the ninth day of his illness, I was sent for, and found him in a fit, with general convulsions, and pale countenance, the convulsions continued, at slight intervals, until evening, when he became comatose. He died at midnight.

Autopsy, Twelve Hours after Death.—The general state of the body was very muscular, and well nourished. Head large, with a somewhat prominent forehead. On removing the scalp, the calvaria was found to be bruised, corresponding to the external bruse, but not fractured. The dura mater was perfectly healthy; on dissecting off the membranes the pia mater was found to be highly congested, and in that portion covering the anterior lobe of the right hemisphere, was an irregular shaped growth of bone moulded on to the convex surface of the brain-substance. It was about one inch by three-quarters, and a few lines in thickness, with several spiculæ in its immediate neighbourhood, in the meshes of the pia mater; the outer surface of this bony deposit was smooth, and was covered by the arachnoid; the under surface was honeycombed, and the pia mater was imbedded in the depressions. Under the microscope the usual characters of bone were found. The brain surface and its deeper structure were highly congested; the lateral ventricles were filled with a recent clot, which was easily traced down the descending cornua to the base of the brain, and was found to have proceeded from a rupture of an aneurism on the basilar artery, of about half-an-inch in diameter.

The following history was obtained from his brother, who arrived in London from Bordeaux after his death:—Two of his maternal uncles died of epilepsy, and two others are subject to it slightly. The deceased, when a child between four and five years of age, suffered from hydrocephalus, and his head was so much enlarged that it was tapped by his Medical attendant in Archangel, of which town he was a native. He was more or less ill for thirteen months at this time; after which, and up to his fatal attack, he had invariably enjoyed good health.

Remarks.—This case presents many points of interest; for here we have hereditary predisposition to nervous disease; hydrocephalus in early childhood in which paracentesis capitis was followed by a successful result; subsequent development into manhood with more than the average of physical and mental endowments; the peculiar character of the fit; his recovery from the same, with the exception of his memory, till the final and fatal seizure, ending in comatose symptoms. The bone was most probably developed in the inflammatory exudation on the surface of the brain at the time of his attack of hydrocephalus, and probably was the exciting cause of the fit, and accounted for the peculiar symptom present during his temporary convalescence—"the loss of memory"—this led me to diagnose some irritation of the hemispherical surface, which I thought might be from spicula of the inner table of the skull being driven through the dura mater from the violence of the fall; and had he lived, and continued to suffer from epilepsy, I should have used the trephine at the seat of bruise with the hope of relieving him. The condition of the basilar artery easily explains the occipital headache, as this has often been observed as a symptom of some altered condition of the vessels at the base.

23, Finsbury-place.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.
Assistant-Physician to the Metropolitan Free Hospital.

ST. THOMAS'S HOSPITAL.

NECROSIS OF THE FRONTAL BONE—SYMPTOMS OF COMPRESSION—TREPHINING—RECOVERY—REMOVAL OF DEAD BONE A YEAR AFTER RECOVERY.

(Under the care of Mr. LE GROS CLARK.)

A man, aged 41, was recently under the care of Mr. Clark for necrosis of the frontal bone on the right side, and for ulcerations of the left leg. The man, one year before, had been trephined by Mr. Sydney Jones, for symptoms of compression, associated with necrosis of the frontal bone. The patient had been treated by tonics and iodide of potassium for some time, when symptoms of head affection came on; he complained of headache and sleepiness. This condition was passing into coma, when the trephine was used over the dead bone; pus was found beneath the piece removed. Immediate relief followed. The dura mater sloughed, as usual, and there was much trouble in keeping down the protruding brain, some of which was removed. By accurately adapted compresses, Mr. Clark succeeded in controlling it. Great care was requisite, as symptoms of coma were readily induced by the continuance of the pressure. By steering between the two extremes, sometimes relaxing partly or altogether, a healthy action was finally established, and the opening made by the trephine skinned over. He left the Hospital with a large fragment of necrosed bone still exposed, but firm.

He was re-admitted in April, 1861. After he had been in a short time, Mr. Clark found the necrosed fragment to be moveable. Mr. Clark, on May 7 last, removed it; the piece was about two inches long, one side of it forming the boundary of the hole made by the trephine. The man had no other special symptom, except the ulcer of the leg. The wound from which the diseased bone was removed healed up. Iodide of potassium was prescribed, but without benefit; but under treatment by the bichloride of mercury, the ulcer assumed a healthy aspect.

The patient admits that when young he had gonorrhœa, but says that he never had syphilis. It will, however, appear from the following history, that he has taken a good deal of mercury for other illnesses; and to this, and not to any syphilitic taint, Mr. Clark is inclined to attribute the necrosis of the frontal and other bones. This history was obtained by letter, and is, therefore, necessarily rather crude:—

Up to February, 1855, he had always been a healthy man. On the 6th of that month, when in India, at six a.m., he says "that a sickness came over him, and that he shortly fell into a state of insensibility, and remained so for three days." He was treated, he says, by large doses of mercury for "a bilious fever;" but on the fourth day he recovered from his state of insensibility, and "was covered by small-pox." He never got into good health again after this, and suffered much from pain in his limbs. There is no note as to whether the pain was on one side or not. He continued taking mercury, and was blistered over the left side, under the idea that the liver was at fault. He was not at all relieved by this treatment; but in September, a Surgeon, he says, prescribed for him the iodide of potassium, under the use of which his "rheumatism" rapidly left him. He remained well until January, 1856, when he was again attacked with "acute rheumatism in the head and left testicle." The testicle became much enlarged, and he suffered much pain in it. On May 10 it was removed. In July of the same year, he began to suffer severe pain in the left lower jaw, and was "perfectly lock-

jawed from the inflammation." Two teeth and a piece of dead bone were removed. He continued to suffer from severe "rheumatism" and general debility, and "the bones of his arm, left leg, right foot, and frontal bone," became diseased; and, to still use his own words, "they exfoliated." On March 11, 1859, he took his passage home, and on arriving in England, was admitted into the Hospital in October, 1859.

GUY'S HOSPITAL.

STRANGULATED UMBILICAL AND INGUINAL HERNIA REDUCED BY THE TAXIS, UNDER CHLOROFORM.

(Under the care of Mr. BRYANT.)

N. D., a man, aged 64, was admitted into Guy's Hospital on April 26, with strangulated umbilical hernia of three days' standing. He had been the subject of a hernia for fifteen years, and had worn a belt. The hernia was, however, irreducible, and when admitted was about the size of three fists, the symptoms having evidently been produced by the descent of a fresh portion of intestine. The taxis had been employed prior to his admission, and had failed. Mr. Bryant was immediately sent for, as the symptoms were most urgent, a quantity of dark coffee-ground material being constantly brought up.

Chloroform was at once given, and the patient was brought completely under its influence, when Mr. Bryant rapidly reduced the hernia by the gentlest manipulative efforts.

Upon the same day, and following in succession, a second case of strangulated hernia was treated by the same Surgeon in the same manner, and with equal success. It was in the case of a man, aged 74, who had had a hernia in his right side for fourteen years, and had worn a truss until a few days previously. The bowel came down three days before admission, and had immediately become strangulated. Taxis had been tried, and had failed; and as the symptoms were urgent, Mr. Bryant's assistance was called for. When he saw the patient, a small but tense bubonocele was found in the right groin. As the taxis had been tried unsuccessfully, chloroform was at once given, and when it had taken its full effect the taxis was resorted to, by which means the reduction of the hernia was accomplished by the gentlest force.

The two cases, Mr. Bryant remarks, well illustrate the value of chloroform as a primary remedial agent in strangulated hernia.

ST. BARTHOLOMEW'S HOSPITAL.

PRESSURE ON THE AXILLARY VESSELS AND NERVE BY AN EXOSTOSIS FROM A CERVICAL RIB—INTERFERENCE WITH THE CIRCULATION OF THE ARM—REMOVAL OF THE RIB AND EXOSTOSIS—RECOVERY.

(Under the care of Mr. HOLMES COOTE.)

This case is interesting in several ways. In the first place, it is an example of the development, Mr. Coote believes, of the rudimentary transverse process (pleurapophysis) into a cervical rib. It could not be expected, however, that this, which although very rare, cannot be called disease, should produce very great inconvenience; for if Nature indulges in the freak of adding another rib, or rather developing the pleurapophysis of the first cervical vertebra to nearly the same extent as that of the first dorsal, she would take care, one would suppose, that the other parts should so correspond just as she does with the thoracic ribs, that no interference with the proper play of the nerves or vessels should occur. At the same time, we might expect that although this excess of development occurred according to as orderly a plan as that of any other rib, and was so placed as not to interfere with the parts in relation, yet that it would be more liable to injury or disease from without. In other words, we may say that the rib was physiological, and the exostosis pathological.

In the case of a girl who was some time ago under the care of Dr. Willshire for anæmia, a supernumerary cervical rib was detected on one side. In this case, too, there was local pulsation, but this was believed to be due, in part, at all events, to the anæmia, and it was not attended by any other inconvenience. In Mr. Coote's case, there was not only a supernumerary rib, but an exostosis growing from it, and this it was, Mr. Coote believes, that pressed injuriously on the surrounding parts.

In the case under notice, a woman, aged 26, had observed a "lump" on the left side of her neck as long as she can remember, but it never caused her any inconvenience, and was not attended, as far as she knew, by any symptom of impaired circulation or pain down the arm until recently. About four months ago she began to suffer pain, not so much in the neck as in the course of the nerves of the brachial plexus, extending down the arm and into the fingers—a kind of pain common to pressure on the trunks of nerves, such as might be caused in this situation by aneurism. When she was admitted, the circulation of the arm was also impaired, and in the radial, ulnar, and brachial arteries pulsation could not be felt. The arm also was much colder and more numb than the other. At the same time, her general health seemed to be perfect, and she complained of nothing else. On examining the seat of pulsation, it was found that behind the artery was a projection which was believed to be an exostosis growing from a supernumerary rib, cervical, from the seventh vertebra.

As the symptoms of obstruction to circulation and pressure on the nerves called for operative interference, Mr. Coote determined to cut down and remove the bone. This he therefore did on March 30. It was found to be not only attached to the transverse process at the vertebral extremity, but also by the distal extremity to the first rib. Mr. Coote, however, succeeded in removing the whole of the mass which appeared to implicate the parts. Many nerves were found flattened over the projection from the surface of the bone. There was not the least hæmorrhage. Since the operation the patient had no bad symptom, the wound of which healed, and she went out well. Her arm became gradually free from pain, warmer, and proper feeling has returned. There was not, however, when last seen, any return of pulsation in the brachial, radial, or ulnar arteries. May it not be possible that the main trunk may have been obliterated some time, and that the circulation is carried on by collateral branches, and that the recent mischief is due to recent interference with the plexus of nerves? It is well known that interference with nervous supply has a marked effect in interfering with the circulation of a part as is well seen in the cold, blue, and wasted limb of an infant suffering from what is called infantile paralysis.

The removed bone consisted of a horizontal curved portion and of a projection growing from its upper surface. It was over this part that the nerves were stretched and flattened.

REMOVAL OF A MASS OF ENLARGED GLANDS FROM THE AXILLA.

(Under the care of Mr. SKEY.)

On Saturday fortnight Mr. Skey removed a mass of enlarged glands from the axilla of a young woman about 25 years of age. She had had some swelling in that position for several years. Mr. Skey first saw her a few months ago. There was then no doubt that the tumour consisted of enlarged absorbent glands. No operation was at first contemplated, but no improvement following the use of the usual remedies, Mr. Skey began to entertain the question of removal. Mr. Lawrence then saw her in consultation. He agreed with Mr. Skey as to the diagnosis of the case, but as the growth was innocent, and her health was not affected, it was determined to continue local and general treatment. A seton was passed through the mass. It, however, became larger, and the movements of the arm were impeded. It was, therefore, decided to operate. About a dozen glands, varying from the size of an egg to a bean, not containing any deposit, but apparently simply hypertrophied, were removed. Mr. Skey remarked on the great difference in the facility of removal of tumours of different character in this region. In this case the glands were easily turned out of their loose, cellular envelopes. In case of cancerous tumours the difficulty and danger of operation were much increased. The patient fancied that the enlargement had been caused by an injury; but this, as Mr. Skey remarked, was not likely to have been the case.

With regard to history of hereditary tendency to tuberculosis, the only fact obtained was that the patient's mother was said to have died of consumption. She herself had been

liable to slight cough. After the excision the wound progressed well, and it is now rapidly healing.

We may remark, that the state of hypertrophy, without any evidences of heterologous deposit, is one very frequently presented by "strumous" glands. In some instances, more especially in those in which the patient is phthisical at the time, distinct masses of tubercle are seen. In most of those, however, in which the good state of the patient's health, and the chronic condition of the glands, tempt the Surgeon to an operation, the disease is found to be simply a state of hypertrophy. Such was the state of a very large bunch of glands which Mr. Hilton removed from a girl's neck at Guy's Hospital about ten years ago, and which we then recorded. In a case which was under Mr. Hillman's care in the Westminster Hospital in 1859, about twenty glands, varying in size from a pea to a walnut, were excised from the armpit of a boy, aged four. Mr. Hillman described the glands as presenting on section "an homogeneous surface, of a pinkish yellow colour, moderately firm consistence, and without any trace of tuberculous deposit." When enlarged glands are met with in persons of full adult age, there is now and then some difficulty in pronouncing a positive diagnosis between cancer and "struma." It is true that primary cancer is of rare occurrence in the lymphatics, nevertheless it is occasionally met with. The three following cases are of interest in relation to this subject:—

THE LONDON HOSPITAL.

ENLARGED GLANDS IN THE AXILLA OF AN ADULT—DIAGNOSIS BETWEEN CANCER AND STRUMA.

(Under the care of Mr. CURLING.)

A man, aged 33, thin, but florid, was admitted about a month ago under Mr. Curling's care. In his left axilla was a very large mass of enlarged glands. Some of the single glands were larger than pigeons' eggs, and the whole made up a swelling the size of two fists. The opinion which had been previously formed was that the disease was malignant, and Mr. Curling examined the case very carefully, with the view to determine this point. A fact which at first sight seemed to favour that view, was that the glands of the neck on the same side were also enlarged, while there was no disease either in the opposite axilla or neck. The glands which were enlarged were peculiarly hard, and both in the neck and armpit the tumours which they formed were quite free from inflammation. The man stated that they had only begun to enlarge about eight months before his admission, and that he had never in childhood suffered from similar affection. In the neck the chain of diseased glands extended from the clavicle to the ear. There had been some pain, but nothing of a distinctive character. The following facts favoured the scrofulous hypothesis:—The man had lost a brother in phthisis, and he had himself suffered from cough, and had spat blood in decided quantities; although he had recently got thinner, he still retained a florid complexion, his lips, however, being a little dusky.

The decision came to by Mr. Curling, and those of his colleagues who saw the case, was that the enlargement was not malignant, and this opinion was confirmed by the improvement which afterwards resulted from the use of iodine. When the man left the Hospital, although decided diminution had taken place, the masses were still of very considerable size.

ENLARGEMENT OF THE GLANDS OF THE NECK IN AN ADULT.

(Under the care of Mr. CURLING.)

A man, aged 40, was under Mr. Curling's care about a year ago on account of a suppurating glandular mass in the left side of the neck. His complexion was that of one who had lost very large quantities of blood, being deathly pale. Yet he had not lost blood, nor had he suffered from any disease prior to the enlargement of the cervical glands. At the time of his admission the latter were in a state of suppuration; soon afterwards the abscess was opened, and a large quantity of thin pus was evacuated. A week or two after this occurrence, and when the removal of the fluid permitted a fair examination, the state of the parts consisted in a soft swelling of glands, cellular tissue, and skin, ill-defined and extending from the lower jaw half way to the clavicle. In the centre of the mass were three or four fistulæ, which led deeply. Much difference of opinion now prevailed as to whether the mass was cancerous or otherwise. Mr. Curling inclined to the opinion that it was so, and such, in the result, proved to be the case. By degrees the several sinuses were laid into one ulcer, and a large, soft, fungating mass presented itself. After about six months' stay in the Hospital the man returned to his home to die. His constitutional state had not much altered; for at the time of his admission it was nearly as bad as could be imagined. It is needless to say that careful search for any external ulceration had been made; the tongue, fauces, etc., as well as the skin of the head and neck were, however, quite sound. It was clear that the disease was an example of cancer beginning in the lymphatic glands. It was also interesting to note that the cachexia which usually follows cancer had, in this instance, preceded its development.

ENLARGED GLANDS IN THE AXILLA OF A MIDDLE-AGED WOMAN.

(Under the care of Mr. HUTCHINSON.)

A short time ago, Mrs. A. B., a delicate, rather phthisical-looking woman, applied to me in the out-patients' room, on account of a tumour in her left armpit. She was about thirty-six, a widow, and had borne a family. One of her parents had died of phthisis, and the tendency to that complaint had shown itself in other relations. She had herself suffered from cough. The tumour consisted of about ten enlarged glands, varying in size from a pea to a walnut. All of them were very hard, they were connected together by thickened bands of cellular tissue, but there was no diffused inflammatory agglutination. One of them was united with some firmness to the parietes of the chest. On careful examination of the adjacent breast, no tumour whatever could be found. The woman stated that she had never had any swelling in the breast. She had first noticed the enlargements in her armpit about two years ago, and they had slowly but steadily increased. Some stabbing pain had recently been experienced, but not much. No enlarged glands could be discovered in any other part.

The slowness of growth, the age of the patient, the hardness of the glands themselves, and the peculiar manner in which the bands of cellular tissue seemed to grow into the gland texture, all appeared to me to point to the malignant nature of the disease. Primary scirrhus of the lymphatics of the axilla is certainly very rare, we have, however, in former years recorded several in the Hospital Reports of this Journal.

RARE AND ANOMALOUS AFFECTIONS OF THE NERVOUS SYSTEM.

Diseases of the nervous system often manifest themselves in what we might almost call so curious a manner, that, in the present state of physiology, the record of them seems more like collecting curiosities than illustrating practice. We must, however, remember that affections,—for instance, cases of circus-movement,—which being so rare, were necessarily little studied, and yet so extraordinary that they forcibly claimed attention, have by the advance of physiology, been made out to depend on definite lesions of certain parts of the nervous system, so that, by experiment, we can produce in animals the phenomena of disease. The writer lately saw a patient, a man, aged 33, under the care of Dr. Kitching, of York, who when placed in the middle of a room, would at once begin to turn from right to left, the heel of the left foot being the pivot, and remaining in the same position. He is insane. When led back to his couch, he knelt before it, burying his head in his hands. His mental defect rendered it very difficult to ascertain the facts of the case very clearly. He says he "is told to do it," which probably is the only language or idea into which his insane mind can translate the necessity under which he feels that he labours. This case will, we believe, be fully reported in this Journal.

We recorded a few months ago, a case under the care of Dr. Brown-Séquard, in which a man being apparently otherwise healthy, applied in order to obtain relief from a constant tendency of his lower jaw to fall, except when he was either talking or eating. Dr. Brown-Séquard mentioned

the case of a patient who would now and then involuntarily clasp his hands over his chest.

The following is a case the interpretation of which would, at one time, have presented great difficulties. A man was admitted under the care of Dr. Brown-Séquard who had an accident twenty years before, by which he injured the cervical spine. He had had ever since considerable loss of motor power and hyperæsthesia on the left, and anæsthesia on the right side of his body, the face excepted. A short time ago a patient whose case is somewhat similar, but in whom the paralysis has followed injury by a knife in the cervical region, attended Dr. Brown-Séquard's practice. In this case the various symptoms due to lesion of one lateral half of the cord, were most prominently exhibited. On Monday last we saw another case of extreme rarity, *i.e.* recovery after apoplexy into the spinal cord. The man says that, many years ago, he fell down suddenly insensible, and when he recovered consciousness, about half-an-hour afterwards, he found that the whole of his body was completely paralysed, both as to sensation and motion, except above a line drawn round the neck from about the level of the second cervical vertebra. He has gradually recovered, but there still remains sufficient defect of sensation and motor power to confirm his statement of his condition after the fit. We hope to be able to place the details of these interesting cases before our readers.

A patient applied at the Royal London Ophthalmic Hospital lately for paralysis of the third nerve and frontal branch of the ophthalmic division of the fifth nerve. He said that he had frequently a tendency to laugh without cause: he could with difficulty restrain himself, and was in the habit of putting his hand over his mouth to do so. Dr. Paget, of Cambridge, has recorded a case in which, among many other anomalous symptoms, frequent bursts of unmeaning laughter was a complication of epilepsy. At a late visit to the Hospital for the Epileptic and Paralysed, we saw a patient of Dr. Ramskill's of whose case the following are brief particulars,—a young man, aged 18, of good general health, had a spasmodic drawing in of the fingers and thumb of his left hand, especially when his attention was directed to it, his thumb being firmly contracted on his palm. There was no choreic movement of the rest of the arm. There was no paralysis, and the muscles of the forearm, both extensors and flexors, were very strongly developed, much more so than on the healthy side. It is probably a case analogous to what is called "writers' palsy," or properly, spasm.

On December 1, 1860, we recorded a case from Dr. Brown-Séquard's practice. A man, aged 33, was unable to write, from spasmodic flexion of the thumb. In this case the thumb only was at fault, but at one time the whole of the hand had been affected, just as is now the case in Dr. Ramskill's patient. In both the cases there is a history of former disease of the nervous system. Dr. Ramskill's patient when very young, had paralysis of the left side of the body, following some kind of fit. He, however, recovered, with the exception of the spasmodic closure of the hand, and that the left leg was not quite so "good" as the right. He appeared, however, to walk well, and his general health was very good.

Medical Times and Gazette.

SATURDAY, AUGUST 3.

NIHILISM.

In continuation of an article in the first Number of the present Volume, we now direct attention to one cause of the neglect of therapeutics which is in full operation amongst us at the present moment—the half supercilious, half sceptical spirit with which the use of drugs is regarded by a certain portion of our Professional brethren. This has arisen, naturally enough, out of the inevitable perversity which makes us rush from one extreme to the opposite, or out of the infirmity which makes us unable to strike the just balance between two independent truths. Our forefathers put too much faith in drugs, and trusted in them to the neglect of air, cleanliness, and diet; moreover, the English Apothecary used to administer large quantities of medicines because he was paid in no other way. So we, by way of compensation, get rid of one error by running into another; and we not merely repudiate the sale of drugs as a means of payment, but we profess a scepticism as to their value in the treatment of disease. Young men say "they have no faith in drugs," and plume themselves on their enlightenment as they say so.

Doubtless our ancestors erred by an over-officious and meddlesome style of practice. They acted as though their drugs possessed specific virtues, which we know they can lay no claim to, and as if no natural process could go on without help. Let us take down a volume from our shelves describing the common practice a century and a-half ago. Women after parturition swallowed spermaceti to heal up the womb. If a man got a wound, it was treated with vulnerary, balsamic, agglutinative, and styptic applications; magnetic plasters were applied to draw out foreign bodies; it was cleansed by *digestives*, and made to granulate by *sarcotics*, and to cicatrize by *epulotics*. Persons with hernia drank *traumatic* decoctions at the same time that they wore trusses; and broken bones were treated with *ossifragic*, *catagmatic*, and *osteocollic* remedies in the shape of plasters and decoctions, in addition to the splints, by which the broken parts were steadied. (These *osteocollic* remedies, by the bye, consisting as they did of gelatinous soups and calcareous earths, were not altogether despicable.) Akin to this was the practice of giving medicine of some sort in every case of illness. No matter whether wanted or not, the *mixture* was looked for by the patient, and must be prescribed. Hence, although we doubt whether Medical practice was ever so positively bad as it is sometimes represented to have been, there is no doubt that much medicine was given that was inert, and that the habitual routine administration of it led of necessity to the use of medicines in which it would be absurd now to put faith.

But if, on the one hand, drugs have been given too lavishly, or have been resorted to in cases in which rest, nourishment, and fresh air alone would have sufficed to restore the patient's health, it is equally true that there are myriads of diseased conditions which rest, nourishment, and air will not remove, and in which the effect of drugs is certain and beneficial. We freely admit that there are many effects which drugs, so far as we know at present, cannot produce; that there are very few drugs capable of acting as specifics directly upon diseases, and that many of them have but an indirect effect, not so much acting on the disease itself as removing the obstacles to recovery; still, when we consider the enormous power possessed by medicines upon the animal economy, and more especially upon the nervous system, we feel half indignant at the propagation of doctrines which disparage these instruments of the Physician in the eyes of the public, or which lead the younger members of our fraternity to neglect or despise them, instead of working out for themselves a thorough knowledge of their virtues.

The use of drugs is to be thoroughly learned only by practice—through which the studious and accomplished Practitioner comes at last to know almost as certainly what he can and cannot do with them as does the chess-player or the rifleman each with his respective instruments. But any excuse for idleness is congenial to a certain class of minds, and hence the welcome with which a kind of quasi-liberal, half-sceptical school receive the notion that the use of drugs is not worth studying; and not only so, but they think that they show their freedom from Professional prejudice by countenancing the current accusations against drugs on the ground that they are injurious and "unnatural."

The medicine usually selected for denunciation on the plea of its "injuring the constitution" is calomel or mercury in any form. It is pretended that mercury lingers long in the animal body, and produces various deleterious effects.

Charlatans who set up "galvanic baths" pretend that they can extract through the skin quicksilver which has been deposited in the bones; and uneducated dentists always ascribe the decay of their patient's teeth to the taking of calomel, although sometimes, indeed, the mischief is ascribed to steel or mineral acids.

We may admit, for argument's sake, that calomel may in times past have been administered profusely, needlessly, and injuriously, although in most cases the excessive doses were either taken without Medical advice, or at the instigation of the patient. But it is easy to show how void of truth is the assertion that decay of teeth has been caused in this way.

Mercury administered in large doses to any person, and in very small doses to some persons, produces various amounts of disorder of the mucous membrane of the mouth, from the slightest swelling and sponginess up to absolute sphacelus. If the affection be so severe as to destroy the gums, and especially if the patient be advanced in life, some of the teeth may drop out, just as they do in old age, from atrophy of the parts by which they are supported *in situ*. But such teeth may be absolutely sound in themselves; and if there be no loss of substance of the gums, the patient does not of necessity experience decay nor loss of a single tooth.

On the other hand, decay of the teeth, owing to original want of vital force and sound development is constantly seen in young persons who have never taken a grain of mercury. The rachitic, pallid children of courts and alleys may be seen with the milk incisors decayed almost as soon as they are cut; stunted and rickety children (especially idiots) have decayed teeth as a rule, and we have instances under our own observation in which early decay of the teeth has occurred in patients who, we are absolutely certain, have taken no calomel.

Again, it is a curious fact that whenever the nutrition of the body is thoroughly disturbed for any length of time, some of the more passive tissues or structures are apt to suffer. Delicate women who suckle may lose their hair; many persons have imperfect development, or even shedding of the nails, from almost any indisposition; and the loss of teeth during pregnancy is so common, that some women believe they lose a tooth with every child.

But scrofulous, ill-developed, rachitic children, whose teeth are habitually predisposed to decay, are particularly liable, also, to fits of cachexia, or feverishness, or gastric derangement in which the nutrition of the teeth is doubly exposed to interruption. It is matter of experience that nothing cuts short these feverish attacks of children so quickly as calomel in small doses. But then to ascribe to the calomel that "ruin of the teeth," which happens in the same kind of patients even when they take no calomel, is absurd; and such an accusation is singularly inconsistent in the mouths of the quasi-sceptical Naturalistic School, who are wont to question the utility of drugs in disease on the ground that it is impossible to say that the disease might not have got well of itself without the drugs.

In like manner, persons who are out of health are liable to suffer decay of some one or more particular teeth. It is probable that if they seek Medical aid they may take steel or mineral acids to give them power of eating and digesting more food When they apply to the dentist (unless he has had a Medical education) the decay of the teeth is surely ascribed to the steel and acids.

Objections to Medical treatment such as these may be contemptible; but they are not without their force in diverting patients from ourselves to the different establishments of irregular practice, where all kinds of stories about the mischiefs and dangers of "drugs" are greedily caught up and circulated. At one water-cure establishment, for instance, patients are told that any aloes which they may have taken is extracted in their perspiration, and can be detected by its odour!

Another insidious and plausible mode of discountenancing the use of drugs is to represent them as "unnatural," and to speak of "Nature and art in the cure of disease," as if there were some antagonism between them, and as if the use of drugs were artificial, and, if so, reprehensible.

Just as one portion of popular error arises from ignorance of facts, so does another and more inveterate set of errors arise from confusion in the use of words. "Nature," for example, is a word that is incessantly quoted. It is "natural," we are told, to wear the beard: "natural" to drink when thirsty: "natural" for mothers to suckle their infants; and, as the authors of twopenny treatises and lectures on diet never fail to tell us, it is "natural" to eat brown bread. Popular books on Medicine are rich in this sort of practical joke, if we may call anything a joke that destroys human life, for we hold that bad logic destroys more lives than gunpowder. For example: one of the popular books on Medicine which we reviewed lately (and by no means the worst of them) contained a story such as this:—"A monthly nurse once asked me, if she should give some gruel to a newly-born infant. I replied, 'Now don't you think, nurse, that if *Nature had intended* it to have gruel, the child would have been born with a bottle of gruel round its neck?'" This poor woman of course was vanquished by this precious piece of argument; yet she might fairly have asked, in return, had Nature intended the cord to be divided; had she meant the child to be washed and dressed, and whether scissors, thread, hot water, soap, sponge, violet-powder, and cambric chemisettes might not have been objected to on the ground of unnaturalness, quite as much as gruel. The fact is, that the word *Nature* is used to signify at least two independent ideas. One is that brute, naked state in which any given thing happens to be found without interference or improvement by the hand of man: *a state of Nature* as it is called. The other meaning includes the whole faculties and capabilities, including the circumstances favourable to full and luxuriant growth and development. Thus, man in a state of Nature (to use the word in one sense) is a filthy, stinking, verminous savage, thoroughly selfish and utterly deficient in those finer feelings of love for parents and children which we, educated under the influence of Christianity, are wont to call "natural affections." But the nature of man (to use the word in the other sense) includes the possession of conscience and reason, which teach him to check mere brutal instincts, and prompt him to explore, subdue and utilise all the objects he meets with, and to employ them in such a way as to produce for himself the greatest amount of beauty, comfort, health and strength. Hence to denounce, or sneer at, as *unnatural* the use of drugs, which man's instincts prompt him to seek, and his intellect enables him to find, is a monstrous and most mischievous perversity. But so it is. A patient in a well-built house, in a comfortable bed, fed with food and clothed with textures from all the quarters of the globe, and dependent for his comforts, and even his life, on the accumulated products of centuries of human art, is supposed to be treated *naturally* if he takes no medicine: the case is "left to Nature;" but if any of those beneficent means be used which have also been slowly gathered together during the progress of human civilisation,—leeches, for example, to take a little blood where it is superfluous,—anodynes to procure sleep, or aperients to empty the bowels—forsooth this is unnatural and artificial! and therefore suspicious if not positively wrong.

Let us say, emphatically, that to administer drugs out of mere routine is contemptible. To give unnecessary medicines for the sake of adding to Professional profit is degrading. The rash and blindfold heroic practice of giving active remedies in all cases (whether bleeding or brandy) is

dangerous. To neglect air, food, and regimen is to let half our weapons lie idle. But we desire most earnestly to vindicate and uphold the rational and temperate use of those drugs which are employed in ordinary practice; because they can produce effects quickly, which cannot be obtained quickly from rest, diet, or other appliances, and because human suffering may be enormously mitigated by them. Whilst we get rid of the old Apothecary traditions, let us avoid that half-indolent, half-sceptical spirit that would rob us of some of our most valuable instruments, and encourage the public in prejudices that have been but too successfully instilled by our adversaries. Let us study the practical art of healing, and the uses of drugs especially, for, in the words of the author of Ecclesiasticus, "He that is wise will not despise them."

THE WEEK.

The ventilation of most of the public buildings in London is a boon to our Profession. The theatres, Exeter-hall, St. James's-hall, and above all the theatre of the Royal Institution, are all places in which an evening's entertainment is marred by head-ache and furred tongue on the following day, and possibly by one of those catarrhs commonly ascribed to "catching cold," but in reality due to breathing other people's breath, and being immersed in hot air saturated with animal vapour. The Courts of Law are particularly redolent of the hot breath and the scarcely perfumed apparel of suitors and lookers-on, and in all these places there seems as yet no alternative between stagnant, hot, reeking air, that brings headache, and blasts of cold wind, that bring toothache and rheumatism. For example, we read of the following colloquy in the Second Court at Guildhall recently, where Mr. Justice Hill was sitting with a special jury:—

"The jury complained very much of the draught in the court.

"The Judge told them it was better to have in the fresh air than be nearly suffocated by heated air.

"Soon after this the jury again appealed to the Judge, and said they really could not sit there to try the case, as their lives would be in danger. If the Judge would allow them to go to the opposite side of the Court, where the counsel were, they should be very happy to sit and do their duty, but they really could not sit where they were, with a particular door open.

"The Judge then ordered the lower part of that door to be closed, and said that he had suggested that a screen should be put up, which would prevent the draught of which the jury complained.

"The jury then called his Lordship's attention to the curtains which surrounded his seat, and which were then blowing about, and they observed that that fact showed what a draught there must be.

"The Judge said he was accustomed to it.

"A Juror: Yes, my Lord; but your Lordship wears a wig."

For practical purposes we may classify ventilating arrangements under these heads. There is, first, what is called natural ventilation, in which advantage is taken of the elevation of temperature caused by fires and other house arrangements, to create currents, which are admitted through the crevices of doors and all sorts of by-ways in winter, and in summer more palpably by open windows. But this is liable to the objection, that just when ventilation is most necessary, and the outer air the hottest, the air currents so created are the feeblest. The ventilating apparatus of Mr. Cooke, which we noticed last week, is merely a mode of rendering open-window ventilation less objectionable; by diminishing palpable draughts, and filtering off soot and dust. But we may observe that it is scarcely possible to convey air in sufficient quantity, with sufficient certainty, and at a desired temperature to any large number of persons in a crowded space, by trusting to natural ventilation. For this purpose, the air must be made to move. A wind-sail is one expedient; but wind is not to be relied on, and ventilation is most needed when the air is most still. Or the air may be drawn out by suction, by lighting furnaces which shall create a current outward, which is Dr. Reid's principle. Or, lastly, the common sense and practical scheme may be adopted of pumping in air, in such quantities as shall suffice for the respiratory demands of the persons assembled. A system of this kind has been invented by Dr. Van Hecke, and has been adopted at the Chamber of Representatives at the Hague, and at several Hospitals in France, especially the Hôpital Necker; and we hope to witness it in operation in London before long. It professes to give air in ample quantity, warmed in winter, cooled in summer, and without draughts. Air, taken at a favourable spot, is pumped along a canal by a revolving fan, worked by any convenient motive power. In the case of a public building only occasionally occupied, hand labour is as good as any. The air, warmed and moistened, is distributed to the different rooms, and channels are provided for its exit; and we are assured that this is effected without perceptible draught, the condition created being like that of the open-air, with no perceptible wind. The whole apparatus is easily under control, the quantity of air supplied can be most accurately measured, and it is never raised to so high a temperature as to give the burnt smell. If air be wanted, it really seems the most sensible plan to introduce it per force, and to displace used-up and offensive air by fresh pure supplies. If the system answers in Rothschild's Bank, and other buildings to which it is being applied by Mr. Weatherly Phipson, the engineer to the Company which works Dr. Van Hecke's patent, we may hope to hear no more complaints of alternate suffocation and freezing in crowded public assemblies.

The following is a copy of the resolutions regarding Professional intercourse with Homœopaths passed at the Canterbury meeting of the British Medical Association:—

"1. That this meeting repeats and confirms the resolutions passed by the Association at the meetings held at Brighton in 1851, and at Oxford in 1852, in all that relates to the practice of Homœopathy and the recognition of its practitioners by members of the Medical body.

"2. That this meeting not only declares it contrary to Professional honour and honesty, and subversive of science, for legitimate Practitioners of Medicine to hold Professional intercourse with Homœopaths, but refuses equally to accept from those who express their disbelief in the Homœopathic system any excuses for such Professional intercourse, founded on the plea either of mental reservation or of necessity."

Our own opinions on this subject have been so frequently expressed, that we simply record these resolutions this week; but Mr. Fergusson's letter, which we published last week, requires very full discussion in connexion with these resolutions and with a case published by Mr. Ray, of Dulwich, which Mr. Fergusson attended with the Homœopath Bell; and we shall devote an article next week to the very important questions involved.

The sad death of Mrs. Brodhurst last week, and of the daughter of the poet Longfellow (the news of which has just arrived from America), by a precisely similar accident, has revived attention to the necessity for rendering the fine fabrics of which ladies' dresses are made non-inflammable. When Ladies Laura and Charlotte Bridgman, and Miss Plunkett, suffered from the same cause in 1858, we renewed the recommendation we made long before, when poor Clara Webster was burnt to death on the stage, that all light fabrics manufactured for ladies' dresses should be made blaze-proof. We repeated then that "The most delicate white cambric handkerchief, or fleecy gauze, or the finest lace, may, by simple soaking in a weak solution of chloride of zinc, be so protected from blaze, that, if held in the flame of a candle,

they may be reduced to tinder without blazing." The dresses of dancers on the stage have long since been protected in this way, but ladies have not yet learned to purchase none but fire-proof dresses. They will sooner or later oblige the manufacturers to call in the aid of the chemist for this purpose—in the meantime the washerwoman must be pressed into the service. Dr. Odling tells us that :—

"The various means proposed for rendering textile fabrics non-inflammable were carefully investigated a short time back by two well-known chemists, Messrs. Versmann and Oppenheim. An account of their experiments was read at the Aberdeen meeting of the British Association in 1859, and was afterwards published in the *Journal of the Society of Arts*, and in a separate form by Trübner and Co., of Paternoster-row.

"They showed that linen and cotton goods dried after immersion in a solution of one or other of several salts, possessed the property of non-inflammability, and that the best results were obtained with a solution of sulphate of ammonia, or of tungstate of soda, neither of which liquids produced any injurious effect upon the tissue or colour of the fabric. The tungstate of soda solution was found most applicable to laundry purposes, on account of its not interfering in any way with the process of ironing.

"Muslins, etc., steeped in a 7 per cent. solution of sulphate of ammonia, or a 20 per cent. solution of tungstate of soda, and then dried, may be held in the flame of a candle or gas-lamp without taking fire. That portion of the stuff in contact with the light becomes charred and destroyed, but it does not inflame, and consequently the burning state does not spread to the rest of the material."

We may just add, that the mineral *wolfram*, tolerably abundant in Cornwall, is a tungstate of the protoxide of iron—and that a native tungstate of lime is also often found. Tungstic acid is a yellow powder, easily obtained from the tungstate of lime, or from the wolfram. It is insoluble in water, but is readily dissolved by the caustic alkalies.

The decrease of the Irish population—three-quarters of a million in the last ten years,—is not only an *opprobrium*, but a possibly ruinous loss. This is seen clearly enough by politicians :—

"The United States could," says Mr. Russell, "get up an army of a million of foreign subjects who are now naturalized here, and could fight its battles with enormous hosts of Germans, Irish, Italians, French, English, Scotch, Swedes, Norwegians, and Dutch. When I see some of the strong fellows who use our speech, and think of the difficulties of our recruiting in the Crimean war, I cannot but regret the causes, whatever they may be, which deprived the British Isles of such material. The Catherine wheel is busy throwing out sparks and fiery flashes all round the world, but as it throws them off it consumes, and at last there remains but a burnt up and blackened cinder."

The decrease of our rural populations renders it doubly necessary to attend to the sanitary condition of the dwellers in towns.

The Thames Embankment Commissioners have reported on a scheme for embanking the river from Westminster Bridge to Blackfriars, from which point a new street is to be constructed to the Mansion House. The estimated cost is £1,500,000. The Commissioners say :—

"The road would commence at Westminster by an easy descent opposite the clock tower, and be continued on, 100 feet in width, to the eastern boundary of the Temple-gardens. from this point the road would be reduced to 70 feet in width, and carried on a viaduct supported by piers of masonry, rising to the level of Blackfriars Bridge, so constructed as to leave a breadth of water for the convenience of the City Gas-works and the adjoining wharves of about 70 or 80 feet. The spaces between the piers under the ascending road would be left available for barges to lie, and afford easy access to the water between this structure and the wharves.

"From Westminster Bridge to the eastern boundary of the Temple-gardens the embankment—sustained by a river wall—would be solid in its whole breadth, which breadth opposite Richmond-terrace would be 220 feet from the existing river wall. At Hungerford it would be 320 feet from the existing wharf, at Somerset House about 120 feet, and at the Temple about 220 feet.

"With respect to the appropriation of the reclaimed land, we would recommend that as so much of it as shall be in front of the Crown property—which will be about 120 feet in width in its narrowest part—should be laid out in ornamental gardens for the accommodation of the occupiers of the houses, and that the portion in front of the Temple-gardens, also about 120 feet wide, be placed at the disposal of the Society, to be dealt with in a similar manner. The other portions of the reclaimed land may either be kept open for the health and recreation of the public, or be applied to building purposes."

We sincerely hope that health and beauty will predominate over mere economy in the final arrangements.

Our readers may remember that several of the Medical Officers of the late Civil Hospital at Smyrna were assisted materially in the assertion of their claims upon Government by the exertions of Mr. Brady in the House of Commons; and they will be glad to hear that a handsome silver inkstand has been presented to Mr. Brady by the gentlemen in whose behalf his valuable exertions were made.

A Solicitor of Chesterfield, Honorary Secretary to the Chesterfield and South Derbyshire Hospital, has had damages of £300 and £250 given against him at the suits of Dr. Black and Mr. Jones. The Secretary published a libel in a local paper, charging those gentlemen with carelessness, unskilfulness, and negligence in the treatment of a fractured leg :—

"The plaintiffs, Dr. Black and Mr. Jones, are both Surgeons of high repute at Chesterfield, who for years past have gratuitously attended the Hospital. On June 23, 1858, a patient was taken to the Hospital, when the plaintiff, Mr. Jones, made a thorough examination of the patient a few minutes after his admission, but failed to discover a fracture of the bones of the leg between the knee and the ankle. The patient, during the examination, repeatedly stated that he was injured nowhere except where the thigh was fractured; but Mr. Jones affirmed that, despite this statement, he had carefully examined the leg throughout, submitting it to as much manipulation as he thought safe and proper in the state in which the patient then was. Owing to this circumstance, together with the entire absence of all discoloration, this fracture was not in fact discovered until seven days after the accident, when symptoms of mortification had ensued. These symptoms were carefully watched; but it was not until July 2 that the limb was amputated, after several consultations between the Medical officers of the Hospital, when they were all of opinion that it would be the only way to save the man's life. The patient had survived the amputation about twelve hours, when he sank and died.

"Professor Fergusson, Mr. Le Gros Clark, and Mr. Birkett were called, and stated that the plaintiffs' treatment was judicious and consistent with good Surgery, and that it would be almost impossible, under the circumstances, to discover at once that there was a fracture below the knee; the amputation was, in their opinion, performed in proper time.

"Mr. Macaulay, in his address to the jury, contended for the defendant that there was carelessness, arising from a want of proper knowledge and skill on the part of the plaintiffs in discharging their duties as Medical officers to the Hospital, which had prevented them from ascertaining the injury and applying proper remedies at the proper time, and also that the libel itself contained only a fair and temperate account of the treatment of the patient.

"For the defendant, it was proved that Mr. Gisborne, the Surgeon of the Midland Railway Company, and in extensive practice at Derby, had, at the request of the Company, seen the patient on the 28th, when he was told by the plaintiffs that the patient's leg had sustained no injury beyond the

fracture of the thigh-bone. The witness and Mr. Walker, another Medical officer of the Hospital, stated that in their opinion a person of competent Surgical knowledge ought to have ascertained sooner the nature of the injury, and that immediate amputation ought to have been performed, when it might have been successful."

Mr. Richard Austwick Westbrook, Solicitor, has been held to bail on a charge of manslaughter, for stabbing a Mrs. Cathrey, at 3, New Cavendish-street, and causing her death. During an altercation after supper, Mr. Westbrook threw, or in some way projected, a common dinner-knife across the table, which struck the deceased upon the abdomen, penetrated a thin dress and three petticoats, and inflicted a wound. The knife was old and thin, and worn sharp, both back and front. The deceased withdrew the knife, and said she was wounded. One of the witnesses deposed that she said:—

"'Pray nerve yourself, for I think I am wounded more than I expected.' She then asked me to undress her, and I did so, and saw a wound, and was much shocked. She begged me not to be alarmed, for it was a 'mere scratch, and she did not feel the knife enter, nor when she pulled it out.' It bled very slightly for such a wound. The deceased said, 'I think I shall die, but I gave Mr. Westbrook great provocation.'"

Mr. Thomas Young, of 8, Sackville-street, gave evidence as follows:—

"I had attended the deceased lady for twenty years. On Wednesday morning her son came to me and said Mr. Westbrook had sent him to fetch me, as his mother had received an 'accidental wound.' I went, and saw her lying on the second floor, and saw the cut, the size of the table-knife shown me. On inserting my little finger I found it was the size of the knife. The deceased was an extremely portly woman and had a protruding belly, and it was just the sort of wound one might expect from the knife. To have caused her death the knife must have entered three-quarters of an inch. It just passed through the walls of the belly, and went through both layers of the peritoneum and the bowel. I have made a post-mortem examination, and found an opening of the intestines. The deceased became exceedingly oppressed after twenty hours, and I found her dead next morning. There were no other marks of violence. She told me that she was certain Mr. Westbrook would not hurt a hair of her head.

"By the Coroner: I have only done sufficient to ascertain the cause of death. I found an opening into the cavity of the bowel, and it had penetrated the ileum. The cause of death was hæmorrhage from the superior mesenteric artery, and consequent peritonitis. Death was caused by the wound. There was not much loss of blood. The deceased told me twenty times it was an accident."

The moral of the case is the very slight force required to cause a sharp knife to enter a tense abdomen, covered with three petticoats. The rebound of a knife merely thrown down forcibly on a table might do it.

David Griffith Jones has been committed for trial on the charge of "feloniously forging and uttering a certain document, purporting to be the last will and testament of Mrs. Sophia Bellis, now deceased."

Dr. Wilks informs us that diarrhœa prevails to a considerable extent in his neighbourhood, and that both among the out-patients at Guy's, and among the children in the Waterloo-road Infirmary he has seen very many severe cases; and that in some instances it has put on the choleraic form. Thus, a few days ago, he was sent for to see, in conjunction with Mr. Burns, of Rotherhithe, the wife of a labouring man living in Blue Anchor-lane, Bermondsey, who was suffering with the most marked symptoms of cholera. She was thirty years of age, and for three days had had diarrhœa, vomiting, and violent cramp in the legs. She was lying prostrate in bed, utterly powerless. Her eyes sunken in her head and half-closed. She was making vain efforts to vomit, and colourless motions were passing from her. She was too feeble to speak, her tongue, hands, and feet, were cool, but not absolutely cold. The skin had the peculiar dusky hue seen in this disease. She occasionally moved her arms about outside the bed, (cholera patients, says Dr. Wilks, always place their arms outside the bed,) and occasionally moaned. The prostration was to that excessive degree which is remarkable in this disorder. We are happy, however, to be able to add that when we last heard from Dr. Wilks she was recovering. He has also seen two or three other cases of less severe character, but where the evacuations were of the kind called "rice-water."

We stated last week that the Bill for the Regulation and Inspection of Chancery Lunatics would probably be abandoned this Session. On the motion for going into Committee on Wednesday night, it was opposed by Mr. Walpole, Mr. Henley, and other members, on the ground that all the clauses required careful consideration, and the further progress of the Bill this year has been arrested.

Ars longa, vita brevis. Life is too short for any of us to waste time in quarrelling, and we are seldom disposed to trouble ourselves or our readers by noticing the attacks of other Journals. Our time is far better occupied in preparing scientific and practical information for the Profession. But an article in the *British Medical Journal* of last Saturday, written in the worst possible taste, does require a passing notice. From time to time we have given expression to our opinions, and to those of various Members of the Association which now exists almost solely for the support of its Journal, and have given various reasons for the belief that the funds of the Association might be far better expended in other ways. No answer has ever been given to these arguments; the reply has always been that our motives are corrupt; that we do not believe what we write, but simply write that which is best calculated to promote the commercial interests of this Journal. We need not insult the understanding of our readers by pointing out that the line of conduct imputed to us would be simply idiotic. The most good-natured and confiding among them would instantly detect and resent so clumsy a trick. Even those who, differing from us in opinion, might sometimes be disposed to question our motives, would at least give us credit for that small share of common sense which leads men to act upon the well-known truism that "Honesty is the best policy." When we argue that the Association might spend its money better than it does, we claim the same credit for honesty of purpose as we grant to any Member who may argue that the Journal is the great end and object of the Association. The imputation of unworthy motives is one of the most common artifices of unscrupulous advocates of a losing cause. When a most estimable judge, Coleridge, was lately taking leave of the Court in which he had presided so long, he thought it necessary to notice the growing prevalence of such tactics as an indication of a lowered tone at the Bar, and he implored his younger brethren "never to do as barristers in Court what they would be ashamed to do as gentlemen." We offer similar advice to the Editor of the *British Medical Journal*. If his own self-respect be not a sufficient check upon him when he takes pen in hand on behalf of the Association, he ought still to write as the representative of two thousand *gentlemen*. If he will do this, we are quite sure that, so long as he is Editor, the pages of

the Journal will not again be disgraced by such an ungentlemanlike article as that on the ninety-seventh page of their present volume.

REVIEWS.

Explorations and Adventures in Equatorial Africa. By Paul B. Du Chaillu. 8vo. Pp. 479. London: 1861.

A book which assumes to be in some degree scientific, and which has certainly been the great hit of the season, the delight of Mudie, and the pet of the club and the drawing-room, can hardly be passed over even by the Medical reviewer. We shall not go into the controversy as to whether the author really penetrated the fever-laden jungles of Central Africa to the extent he asserts, or whether, as his adversaries would imply, his actual researches were confined to the coast, while he is mainly indebted for his narrative to the vague statements of slave-dealers and others. We shall try the cause on other grounds, confining ourselves to such matters as come within our particular province. It must be stated in fairness that M. Du Chaillu himself disclaims all pretence to any special Medical knowledge. Some allowance must, therefore, be made for misconception or ignorance. On the other hand, any wilful exaggerations are the more likely to be evident.

A passing word for the hero of the book, the great gorilla—a huge anthropoid ape, which, with more than the courage of the lion, combines the ferocity of the tiger—a beast which advances upon the hunter by slow and measured steps, while he beats his "vast breast with his paws, which produce a dull reverberation as of an immense bass drum." Hear this, ye professors of the gentle tapping art! How must all your ideas of "a tympanitic sound," all that you associate only with the most profound emphysema, yield to this performance! Some may carry curiosity so far as to wish to know something of the minute structure of the lungs which fill this reverberating thorax. Assuming it to be very peculiar, we regret that we are in no condition to supply the information. But the gorilla can turn his upper extremities to other account than percussing his chest. Our Author speaks of them as those "terrible claw-like weapons, with one blow of which he tears out the bowels of a man," (page 304;) and this we confess again excites our surprise, for, at page 357, we read that, although the hand is large and muscular, the nails are "shaped like those of man, but smaller in proportion and projecting very slightly beyond the ends of the fingers," and the specimens we have seen confirm this. Now, we can well understand the infliction of a wound such as that described, by claws less than those of a tiger, but for the worn-down human-like nails of the gorilla the performance *seems* impossible. Although not such advocates of the gorilla as Dr. Gray, who seems to think him a harmless vegetarian, we like fair play.

The existence of cannibalism amongst many negro tribes has been confirmed by former writers, and very recently by Hutchinson, but we were unprepared for the description given of it by our Author. He tells us that the Fans, a numerous and intelligent race, not only devour healthy subjects slain in battle, but also the bodies of those who die of disease. It is contrary to etiquette, however, that the body of a person should be devoured by those to whom he was known in life. The prudent Fans, in consequence, part with their corpses to friendly tribes who, in turn, supply their obliging neighbours with these indispensable articles of luxury.

If any allowance can be made for this disgusting practice, it will be found in the facts, that game is scarce in the country, and an affection called "gouamba," or an inordinate longing and craving for meat, is common. M. Du Chaillu affirms that he has himself suffered often enough to vouch that it is a real and frightful torture. This at once suggests the Liebigian theory of climate in relation to diet. Graves long ago pointed out the fallacy of supposing that cold alone induced a great desire for animal food. He asks the pertinent question, whether, in proportion to his size, the Bengal tiger does not require quite as abundant rations as any of the Arctic carnivora?

One of M. Du Chaillu's adventures was with his cook. The miscreant, by his own confession, poisoned some chicken soup with two tablespoonfuls of arsenic, and of this soup his master took two plates. He had scarcely finished the last when he "was seized with frightful pains, and vomiting and diarrhœa set in, which lasted all night." M. Du Chaillu adds: "I owe my life to his (the cook's) *over*-dose; consequently, to a kind Providence."

We have no objection to the latter concession; but must assure the Author that such a saturated solution of arsenic was admirably adapted to effect the object for which it was intended, and in that respect *too much* of it could not have been taken.

Leprosy is stated to be rather common among the African tribes, and that the subjects of it are kept in a room apart in the house. "The disease is in certain families, and often does not break out till the unfortunate subject is full-grown."

But the most extraordinary disease in Africa, and we would venture to say anywhere else, is that known to the Ashira as "Etita." Here is a case in the Author's words:—

"Ishoungi, who was as black as a crow when I left him, had, in *less than a minute*, become covered all over with blotches, which gave him a ghastly spotted appearance, frightful and sickening to the view. . . . The swellings extended under my own observation, and in less than five minutes scarce a spot on his whole body was left in its pure black state. Even his face was covered. His lips were disfigured and his eyes closed. . . . The swellings are large, but of different sizes and shapes, and look much as though the subject had been badly scalded. The skin is raised, and a thin matter collects beneath it. An intolerable itching pain follows, which makes the poor sufferer scream with agony."

Here was an example of a disease sufficiently acute; but what shall we say of the activity of the remedy:—

"Presently one of the Ashira men came along, and seeing his condition, took out some yellow bark of a tree, unknown to me, from a pouch he carried. This he made fine, then chewed it with water in his mouth. When he had chewed it a little he spat the juice on the other's body, and Ishoungi rubbed and spread it gently. Wherever it touched the swelling went down. In little more than twenty minutes—certainly in less than half-an-hour—the swellings were gone, leaving scarce any mark upon his body."—P. 465.

We must now take leave of M. Du Chaillu, leaving the reader to judge, from the evidence we have placed before him, whether a licence to which travellers are said to be addicted has been indulged in. However this may be, no one who wishes to join in the small talk, or pseudo-scientific gossip of the day, can well avoid looking through "the Gorilla Book."

A Treatise on Human Physiology. By John C. Dalton, Jun., M.D. Second Edition. 8vo. Pp. 690. Philadelphia and London: 1861.

It is not often that the Americans indulge in the luxury of an original physiological book. When they do so, it is a really good thing, and one which will bear a second inspection, and is sure of the honours of a second edition. Only two years ago, Dr. Dalton, jun., of New York, sent us as a text-book one of the most valuable physiological works ever published. We congratulate the Author on the full appreciation of the first edition, and we welcome the second most cordially. We have still further to acknowledge the additional value which the labour of the short interval between the two publications has given to the good already in possession. It was the object of the Author to present to the reader, in a condensed form, all the new facts and ideas in physiology which have marked the progress of the Science within a recent period. At the same time, with the conclusions which physiologists have been led to adopt on any particular subject, he endeavoured to show the experimental basis upon which those conclusions were founded; repeating and verifying old experiments, and illustrating obscure points by original investigations. This was done most clearly and satisfactorily, and the numerous new, well-executed wood-cuts are very far superior to the stock and obsolete things to which our eyes have been accustomed for so many years past. Only eleven out of the two hundred and fifty-four designs have been borrowed from other writers, to whom they will be found duly credited. Of course, no book of this kind can be without its special defects. Most of these are best known to the Author. Others are sure to be

suggested by judicious critics. No small pains have been bestowed on this edition to make good what was wrong, and to modify for the better, where the general plan of the work admitted of use being made of the experience of others. There is to be observed the same wise abstinence from the lengthened discussion of theoretical points, and the avoidance of matter which does not tend to show the actual condition of the science. Among the additions and novelties in this edition the most worthy of note are an entire chapter devoted to the consideration of the special senses, which were before only incidentally treated of; the introduction of some new views and facts in regard to the cranial nerves; and particulars of new experiments on the function of the cerebellum. The results of these experiments, taken by themselves, would invariably sustain the opinion of Fleurens as to the power of the cerebellum in associating or co-ordinating the different voluntary movements. But another very important fact appears from the experiments of Dr. Dalton. Notwithstanding the removal of a large portion of the cerebellum, and the consequent loss of the power of muscular co-ordination, this power is regained, in process of time, without any regeneration of the substance taken away. There is also the corresponding fact, that morbid alterations of the cerebellum, particularly those of a chronic nature, have been repeatedly observed, without giving rise to any marked disturbance of the voluntary movements. The temporary loss of the power of co-ordination seems, therefore, to be due to the shock of the sudden injury, rather than to the destruction of any especial portion of the mass of the cerebellum.

The hope of the Author that he has improved his work, and that in its present form it will be more likely to accomplish the object for which it was designed, we are quite assured will be fully realised.

On Acute Ophthalmia as it occurred in the Left Wing of H.M. 37th Regiment during 1851-52, *whilst stationed at Colombo, in Ceylon.* By J. W. Fleming, F.R.C.S., and Surgeon to the Regiment.

Ophthalmia harasses Europeans in certain hot climates, though not in all. It is a disease which, once taking root or establishing itself in a corps, gives infinite trouble and annoyance to all. In this exceedingly practical pamphlet we have explained to us by a gentleman of large experience, how he opposed the spread of ophthalmia in his Regiment, and the success of his measures is very satisfactory. The statistics are full and authentic, and we recommend the work to all interested in Indian affairs.

It is a sufficiently remarkable circumstance in the history of the ophthalmia as it attacked the troops in Ceylon, that in many cases the disease was complicated with phlyctenulæ and excavating, colourless ulcers of the cornea; in Britain this complication more usually attacks the young; in Ceylon it fell on the adult. Mr. Fleming's advice as to the treatment of such complications deserves attention.

The Autobiography and Services of Sir James McGrigor, Bart., late Director-General of the Army Medical Department: with an Appendix of Notes and Original Correspondence. 8vo. Pp. 418. London: 1861.

The Autobiography of Sir James McGrigor possesses an interest by no means confined by the boundaries of a Profession. True it is, that the Medical man will read it with a peculiar satisfaction, because he will feel that it relates to the doings of a man who, in his time, has effected more than perhaps any other to elevate the class to which reader and writer belong. The Profession is proud of the memory of such a man, not only on account of the benefits it has received through his instrumentality, but because each step that he has gained for them in public estimation and in public favour, has been the immediate result of his own personal advancement. We speak of the entire Profession here; for although the efforts of Sir James were primarily directed to the advancement of the social and military position of the Army Surgeon, who can deny that the improvement in education for this department of the public service exerted a remarkable revolutionary influence upon the training of those, whose prospects leaned towards civilian life?

The Autobiography of Sir James McGrigor is the history of an energetic working man, who, not content with his bare duty, threw his active mind and vigorous frame enthusiastically into his work, determining to make all his opportunities tell for something in the promotion of science and the well-being of the State he served. It is the history of sanitary reform in the arrangements of an army both in the field and at home. Not very long ago, grievous deficiencies in barrack accommodation, etc., were paraded before the eyes of the public, but what are these to the condition of affairs when Sir James McGrigor commenced his career of labour and usefulness? "Typhus fever broke out in every regiment in the garrison, and committed dreadful havoc." "The number that died of yellow fever was four times that of those who fell by the bullet and the bayonet." Statements like these are continually met with in the earlier chapters. It is the history, finally, of reform in Medico-military administration, of an exchange of returns of ounces of soap and oatmeal, to reports on sickness, disease, and mortality, reports on Medical topography and military hygiene.

The pen of Sir James McGrigor is arrested at the period of his appointment, in 1815, as Director-General of the Army Medical Department. The remaining incidents of his life are briefly supplied by the editor of the volume.

We have said that this biography will be perused with interest outside the pale of our own Profession. It abounds in characteristic anecdotes of the commanders, under whom the author served, and lays open to our view many stirring incidents in the campaigns in which he was engaged. In some instances it shows how due regard for the sick and wounded of his army swayed the mind of the great Peninsular commander, and how the efforts of the head of his Medical Department cleared the way for some of his most important victories.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

DEATH OF A FŒTUS FROM PENETRATION OF THE VERNIX CASEOSA AND MECONIUM INTO THE PULMONARY VESICLES.

By Professor FORSTER.

A well-developed fœtus, after making a few feeble respiratory movements, gave no farther signs of life. All its organs were found in a normal condition except the brain and lungs. The brain exhibited the highest degree of hyperæmia. The lungs felt like atelectasic lungs, did not crepitate, and sank in water. Numerous whitish-yellow or yellowish-brown spots of from a quarter to a half a line in diameter were scattered over the surface of the lung, and were seen on the surface of the sections made into the flesh-like substance of its parenchyma. These appearances recalled to the author's recollection a case in which they had also existed, and when they proved to be due to the presence of the meconium in the air passages. The spots were examined by the microscope, and were found to consist of large quantities of hard epidermic scales exactly resembling those of the vernix and meconium. Fatty globules, also, like those found in these substances, a few cholesterine crystals, and some yellow or yellowish-green masses precisely similar in appearance to the colouring matters of the meconium. Even the vesicles of the uncoloured portions of the lung contained the above matters, though in less quantity, while some of them were in the same state as observed in atelectasis. The bronchi contained the same matters, and neither they or the parenchyma of the lungs exhibited any signs of inflammation. One remarkable fact is, that the most attentive examination failed to detect the presence of hairs, which we so constantly met with in the vernix and so frequently in the meconium, the latter consisting, in fact, for the most part of the same elements as the vernix caseosa which has been swallowed with the liquor amnii. (a)

Thus, the entrance of the vernix and meconium having rendered the vesicles of the greatest portion of the lung inaccessible to air, the infant, which seemed strong and healthy, died a few minutes after its birth. The question

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(a) *Vide Medical Times and Gazette,* vol. xxxix. p. 606.

arises how the abnormal inspiratory movements, which alone could have caused this penetration, were produced. As the fœtus from time to time swallows some of the liquor amnii, some of this may have entered the air passages, and by the irritation which it gave rise to have caused inspiratory movements. As the meconium is usually found in the liquor amnii shortly prior to birth, the entrance of these foreign matters could only have taken place just before, or even during the occurrence of that event. It is a more probable conjecture that such inspiratory movements were occasioned by the hyperæmic condition of the brain itself, produced during the progress of the labour. Again, there is a possibility—which, however, has but little in its favour—that the inspirations were first induced during the passage through the vagina, the membranes having burst and exposed the child's nose and mouth to the ingress of the fluid. It is not improbable that this penetration of the meconium and vernix into the air passages may be of more frequent occurrence than is suspected, as by a careless inspection the spotted appearance of the exterior of the lungs and the yellow or greenish masses in the air passages may be easily overlooked. —*Würzburger Medicin. Zeitschrift*, vol. i. pp. 216—220.

CASE IN WHICH DEATH TOOK PLACE TEN YEARS AFTER A PENETRATING WOUND OF THE HEART.

By Dr. MÜHLIG.

Dr. Mühlig states that as far as he is aware only three cases (related by Velpeau, Laugier, and Latour of Orleans) are on record in which life has been prolonged for some years after a wound of the heart. He therefore relates the following remarkable case. The subject of it, a mason, ten years before he came under the author's notice, had received a blow with a stiletto on the left side of the sternum, the cicatrix left after the healing of the wound being there still visible. Although the man's life continued awhile in danger, he recovered so well as to be enabled to follow his employment without any inconvenience, always, however, perceiving a bellows-sound in the region of his heart. He came to the Hospital with alarming symptoms only a few weeks prior to his death, excessive dyspnœa, anasarca, and a very intense bellows-sound being present. This last was a double bruit, accompanying the systole and diastole, and entirely obscuring the physiological signs. The man got worse and worse, his end being hastened by the supervention of gangrene. At the autopsy the left lung was found connected throughout its entire surface to the thorax and pericardium by means of old adhesions. On cutting into the pericardium it was found to be intimately adherent to the heart throughout its whole extent, so as to require strong traction for its removal. On the side of the right ventricle it could not be removed without cutting, and here was felt a hard prominent body, covered by the sternum, and which at first was believed to be indurated fibrine. The heart was considerably increased in size, its hypertrophy principally implicating the left ventricle, the cavity of which was also enlarged and elongated. The right ventricle seemed to form only an appendix and on the inner surface of its wall a rounded aperture, lined with cicatricial tissue, was observed, through which the little finger could be passed into a sac about the size of a small walnut. At the bottom of this was felt a hard body covered with asperities, giving very much the sensation imparted by a carious bone. This was the same indurated body which had been felt through the pericardium. On opening the sac it was found to be a partial aneurism of the heart, containing an incrusted fibrinous concretion, and having its wall solely constituted of the two layers of the pericardium fused into one, no trace of muscular fibres being present. The aneurism was situated at the union of the two upper thirds with the lower third of the wall of the right ventricle; and exactly opposite the aneurism there was a hole in the intraventricular septum leading into the left ventricle, which scarcely admitted the point of the little finger. But on the side of the left ventricle this hole was twice as wide, and it was completely lined with cicatricial tissue, which extended several lines into the left ventricle, forming above a semilunar fold which partially closed the orifice, a similar fold below floating freely in the cavity of the ventricle. Close to the free edge of each semilunar valve of the aorta was a cauliflower excrescence, larger than the size of a pea, and viewed from the cavity of the aorta the valves exhibited a solution of continuity near their free edges, a probe passing through this into the middle of the fungosities. The substance of the heart was of a pale red, with yellowish streaks, and it was flaccid and friable, The auricles were much dilated, and their walls were thinned. —*Presse Médicale Belge*, 1860, No. 43.

EXCERPTA MINORA.

Treatment of Hip-joint Disease.—An interesting discussion upon this subject has recently taken place in the New York Academy of Medicine, to which we can only refer our readers, as being too long for transference to our pages. We may mention, however, that the principal point brought out is the abandonment of the treatment of this disease by mere repose; and the desirableness of treating it through all its stages by extension and counter-extension, for which purpose splints have been contrived by Drs. Davis and Sayres. Extension is not merely used to remedy the deformity produced by the progress of the disease but as a means of treatment to be employed from the beginning.—*American Med. Times*, 1861, Nos. 2, 17, 18, 19, 21, and 24.

Infantile Erysipelas in New York.—Dr. Lewis Smith has taken much pains in collecting the experience of the various Physicians of New York on this subject, and furnishes notes of 36 cases, 24 of these being at or under the age of 6 months, 9 from 6 months to 12, and 3 above the latter age. Of 49 cases, the attack commenced in the vulva in 13, in the arm after vaccination in 16, in the leg in 6, and in the face in 5; in the male genital organs in 3, at the ear in 2, and at the elbow, shoulder, chin, and nates, each 1. Infants under 6 weeks rarely live, from 6 weeks to 6 months recovery is doubtful, while above 6 months a large proportion, under proper treatment, recover. Nearly every Practitioner in New York gives the *tr. ferri muriatis* throughout the disease, and all recommend sustaining treatment—beef-tea and wine whey being commonly advised. The lowering treatment recommended by Bouchut may explain the greater fatality of this disease in France. As a general rule, attempting to circumscribe the disease by local applications is disapproved of in New York.—*American Med. Times*, No. 25.

American Formulæ.—1. *Cannabis Sativa Indica.*—The extract should be first triturated with olive oil, with which it readily forms a transparent solution. This mixed with mucilage and sufficient water forms a permanent mixture. 2. *Gum Guaiacum.* —One drachm, triturated with ½ drachm of carbonate of soda and a few drops of water, forms a pasty consistency, which can be made into an emulsion, with an equal weight of gum arabic and water q.s. 3. *Balsam of Tolu.*—One drachm triturated with ½ drachm of soda and a few drops of water may afterwards be made into an emulsion with one drachm of sugar and gum and an ounce of water. 4. *Pills of Iron by Hydrogen*, and other insoluble substances, can readily be made into a tough mass of proper consistency by the use of a small portion of tragacanth powder and honey. Pills containing *camphor* may be readily prepared by using honey and soap as excipients. 5. *Sugaring Pills.*—First moisten the pills with a strong solution of balsam of tolu in ether or chloroform, and then throw them immediately into a box containing sugar in very fine powder, and shake. 6. *Colourless Solution of Gutta-percha in Chloroform.*—To 8 ounces of chloroform in a bottle add 1½ ounces of gutta-percha in small slices, and shake occasionally till dissolved. Mix 2 ounces of carbonate of lead in 4 ounces of chloroform, and add to former mixture, shaking well together. Let the mixture stand for ten days, or until the solution has become limpid and colourless, or of a pale straw colour, when decant, and keep in stoppered bottle.—*American Med. Times*, No. 23.

Chlorate of Potassa in Adynamia.—Dr. Hanbury Smith attributes great "oxygenating powers" to this substance, and refers to his experience in its employment at the Ohio Lunatic Asylum in cases associated with unusual lividity and coldness of the lips, extremities, and sometimes tip of the nose, evidently due to an embarrassed circulation. The chlorate has corrected this condition of the circulation after all other means have been tried in vain; speedily diminishing the lividity, coldness, and sluggish movement, the health of body and mind manifesting corresponding improvement. The dose given was two or three grains (soon increased to ten) three times or oftener daily in camphor mixture. It was a valuable adjuvant to other therapeutical agents wherever this state of the capillary circulation existed. It should not be taken when a sense of natural or morbid hunger is present,

and it should always be abundantly diluted. Ten grains is the maximum dose that is useful. In the febricula of infants it is of great use, one grain being given in water every hour or two. In stomatitis Dr. Smith has found it as useful as have other Practitioners, and given in conjunction with quinine and mild aperients it is a valuable prophylactic in fever, and a good curative agent in the state of constitution favouring the eruption of boils, felons, whitlow, and carbuncle.—*American Medical Times*, No. 23.

FOREIGN CORRESPONDENCE.

GERMANY.

Erlangen, July 2.

THE UNIVERSITY.

The number of students at this University is now nearly 500, and of these two-thirds study divinity, our theological Faculty having, by their teaching exclusively the orthodox doctrines of the Church, in opposition to the "Essayists and Reviewers" of the neighbouring Tübingen, proved a great attraction, not only to Germans, but also to foreigners; amongst the latter Englishmen and Americans predominate. In former times the number of Medical students was much larger than it is now; in this session, however, an increase has again taken place, and we have now more than a hundred of them. Erlangen being a small town, much cannot be expected from the cliniques of our University, as now-a-days only few additions can be made to Medical science, unless a large material for observation is given, which is only to be had in large Hospitals. The Medical instruction, however, is at present in a very satisfactory state. Professor Thiersch is Director of the Surgical Clinique, Professor Kussmaul Director of the Medical Clinique; other well known names are those of M. Gerlach, for anatomy, M. De Gorup-Besanez, for chemistry, M. Wintrich, for diseases of the chest. The surgical wards contain almost always a considerable number of patients suffering from tumours, who come here from all parts of Bavaria. The Medical Clinique is generally not quite so full as the Surgical; but nevertheless we sometimes observe cases which even Professors in Berlin and Vienna would be delighted to introduce to their classes; and I shall to-day give you a short account of some of these, which were recently observed in the wards of Professor Kussmaul.

ON DILATATION OF THE VEINS.

Three cases of disease of the blood-vessels have recently come under our notice. In two of them a closing of the vena cava ascendens had to be assumed, and the reflux of the blood took place through the dilated subcutaneous veins of the trunk, in consequence of which the symptoms of "caput Medusæ" were present, as first described by Marcus Aurelius Severinus. The third case was rarer still, being one of dilatation and varix of the lymphatic vessels. The subject of the first case was a milliner, aged thirty, who showed at both lower extremities, and at the lower parts of the trunk, a network of subcutaneous veins, which communicated with each other in many places, and which were dilated to the thickness of the little finger. On certain parts, especially on the external part of the right thigh, they formed thick pads. On the abdomen two principal tracts of them were to be distinguished, one on each side of the linea alba, corresponding to the subcutaneous epigastric veins. Those on the right side were more extended than those on the left, and were visible as far upwards as the third intercostal space, where they probably discharged their contents into the V. mammaria interna or intercostalis. It was easy to show, by compression, that the blood flowed from below upwards. The other veins on the surface of the trunk anastomosed with the expansions of the sub-cutaneous branches of the venæ subclaviæ. A large portion of the blood, therefore which ought to have flown through the vena cava ascendens to the heart, reached the latter by *detours* through the cava descendens.

In spite of this extensive anomaly in the system of circulation, which had already existed for fifteen years when the patient came into the Hospital, and in spite of an enormous tumour of the spleen, which might be pushed about like a large cake under the abdominal parietes, and extended beyond the median line to the right side, the patient was in very good general health, and only complained of a large ulcer on the foot, from which she had suffered several times in the course of the last few years. The caput Medusæ, which had to be ascribed to a closing in the system of the lower vena cava and the vena portæ, had begun after an icterus, which was connected with an immense hydropic swelling of the lower part of the body. When this disappeared, the veins had gradually dilated. The supposition of a closing in the portal system rests on the tumour of the spleen, the origin of which was not to be explained in any other way, as intermittent fever had never been present.

The succession of phenomena during the illness which the patient had had fifteen years before, rendered it very probable that the symptoms of obstruction in the liver and in the venous system had the same cause, perhaps an inflammation in the space between the vena portæ and the vena cava. The closing existed probably in the upper part of the vena cava ascendens; but it might, of course, proceed downwards to the venæ iliacæ and their branches, perhaps in an unequal degree on the two sides.

In another case of similar kind the closing had probably its origin in one vena iliaca and its branches, from which it proceeded more or less far upwards. The dilatation of the veins was here confined to a small caput Medusæ, which was especially developed in the right hypogastrium, and upwards towards the umbilicus. The patient, a man aged 20, of scrofulous constitution, had formerly suffered from suppuration in various parts of the body; and when he came into the Hospital he had a fistula below the left buttock, which did not lead to a diseased bone. Two years ago he had been attacked by a very severe disease, accompanied with ascites and œdema of the left leg, the scrotum, and the right leg (the latter in a lesser degree). The dropsy slowly disappeared, but diarrhœa and disposition to vomiting persisted for some time. At a later period a painful swelling came on in the left hip, which, however, did not spread to the hip-joint. An incision was then made below the crista ossis ilei, and a large quantity of pus evacuated. This showed the probability of an inflammatory condition of the left side of the pelvis, in consequence of which the neighbouring veins (vena ilica sinistra and its branches) were closed—a phenomenon frequently observed in the neighbourhood of inflamed tissues. The closing probably reached the vena cava, by which the temporary obstruction was to be explained, which was also manifested by a slight œdema of the right leg.

Dilated veins, used for collateral circulation, were seen in the hypogastrium, especially on the right side; towards the umbilicus they united to one trunk, which disappeared in the umbilical ring, where it formed a slight protuberance. The direction of the current of the blood could not be well ascertained by compression, as there were numerous anastomoses between the dilated veins. The blood, which could not flow through the vena iliaca sinistra into the vena cava, was probably driven into the vena iliaca dextra through the anastomoses within the pelvis; but as it could not flow into the lower part of the vena cava, which was evidently closed, it proceeded, together with the blood coming from the right leg, through the veins of the abdominal parietes upwards, arrived in the umbilical vein, and then passed through the portal system into the uppermost part of the vena cava ascendens.

The general health of the patient, after he had used baths for some time and been placed on nutritious diet, is now good; but the lympathic glands are somewhat swollen and the spleen is also enlarged. This and the ascites and diarrhœa, which previously existed, may lead us to assume a closing in the portal system, by which the anomaly of circulation would be explained. The symptoms observed, however, are not sufficient for enabling us to form an accurate diagnosis. Cases of ascites in consequence of a closing of the vena cava alone, have been observed before this.

I will here add a few words on the collateral circulation in the two cases just described. There can be no doubt, from the analogy of other cases, in which post-mortem examinations have been made, that besides the visible dilated subcutaneous veins, there are also several other dilated tracts of them within the abdominal cavity; such are probably the vena azygos and hemiazygos, which are connected with the veins of the pelvis and the lumbar region. The portal system

has also been found dilated, as compensation for the closing of the vena cava ascendens; this is not surprising if we consider the connexion of both systems, especially by the anastomoses between the venæ pudendæ and the vena mesenterica minor. In the two cases just described, this passage was probably not made use of, as in the former one there could be no doubt, that a considerable obstruction in the portal system existed, and in the latter such an one was at least probable. According to present experience, in a case of complete closing of the trunk of the vena portæ, the circulation is established by the dilatation of the veins in the neighbourhood of the gall-bladder, which anastomose with the vena mesenterica superior; or the liver does not take part in it, and the blood flows from the roots of the vena portæ by their anastomoses with the branches of the vena azygos, hemiazygos, and iliaca interna, into the great system of circulation.

The different condition of the subcutaneous veins in the abdomen in the two cases was of interest. In the former one the epigastric veins proceeded upwards towards the venæ subclaviæ; in the latter they disappeared in the umbilical ring. This latter state has been observed several times already, and such an one is the exquisite case of caput Medusæ, given by M. Cruveilhier in his Atlas of Pathological Anatomy (Livre 16, plate 6). Whether, in such cases, the epigastric veins really discharge their contents into the umbilical vein, which may have originally remained open, or may have re-opened, or into another vein in the peritoneal fold of the ligamentum suspensorium, is at present uncertain. M. Burow has recently made a discovery of much importance for the subject under consideration, viz. that an anastomosis exists between the vena epigastrica and umbilicalis. This is formed by a branch which proceeds from both epigastric veins, and lies closely to the umbilical vein, into which it discharges itself shortly before its entrance into the liver.

ON DILATATION OF THE LYMPHATIC VESSELS.

Another case observed in the clinique of Professor Kussmaul was one of dilatation and varix of the lymphatic vessels on the abdominal parietes of an old woman, who suffered from cirrhosis of the liver and severe ascites, which had necessitated tapping several times. From the middle region of the abdomen a multitude of cord-like vessels of the thickness of quills, which looked like rows of pearls, were much twisted, and prominent, proceeded downwards, towards both inguinal regions; in this course they gradually flowed into one another, and ended in a few large vessels of the thickness of the little finger, which disappeared in the inguinal region. These vessels commenced on the middle and upper part of the abdomen, in spots of different size, which were transparent and not prominent; they were, probably, vessels flattened by great tension, and might have easily been confounded with the cicatrices to be found on the abdominal parietes after numerous pregnancies. These also existed in this case. Such a mistake may have sometimes occurred, if a close examination of the inguinal region was omitted, which is connected with some difficulties when a great hydropic enlargement of the abdomen exists. The right diagnosis of these spots, which were not connected with each other, was in this case only made, after the small, but very wide, canals had been discovered, which were filled with lymph, almost to bursting. On puncturing these vessels a yellow, opalising, neutral fluid escaped which contained a trifling quantity of albumen, and on one occasion showed an acid reaction. The rare phenomenon just described was probably due to the reflux of the lymph being prevented by the colossal accumulation of serum in the abdominal cavity. This supposition is justified by the circumstance that the dilatation of the vessels almost entirely disappeared after tapping, and reappeared as soon as the water again accumulated. It is, however, difficult to understand why the lymphatic vessels of the lower extremities, which must, of course, also be under the influence of the obstruction, were not dilated in the same manner. In fact, the legs were only slightly œdematous. This strange anomaly cannot be explained at present; and in the majority of the very rare cases of dilatation of the lymphatic vessels, which have been observed up to the present time, the cause of the dilatation has not been recognised. In the present instance, however, the post-mortem examination will, no doubt, clear up this point, as a fatal issue is expected to take place shortly.

FOREIGN BODY IN THE HEART.

In conclusion, I will mention a curiosity, which was found here the other day in the course of the post-mortem examination of a young man, who had died of miliary tuberculosis, but had shown no symptoms of heart-disease during life. On opening the pericardium, a smooth fibrous body appeared, which was not adherent, had the size of a bean, and was quite similar to those which are sometimes found in large numbers in the joints; and the two surfaces of the pericardium, which was otherwise smooth, were connected by a multitude of very long and delicate fibrous threads. If this extraordinary residuum of a pericarditis excited our surprise, we were still more astonished on finding an acute body, about half an inch long, in the right ventricle, covered with a thin membrane, and freely projecting into the cavity of the ventricle. On closer inspection, it appeared to be a thorn of Prunus spinosa, Linn., which had undoubtedly been swallowed with the food, and had, from the œsophagus, penetrated to the pericardium, and from thence to the heart. This view was confirmed by a contracted cicatrix, which was visible on the posterior surface of the heart, about one inch above the apex cordis, and just above the septum, through which the foreign body had penetrated into the right ventricle, and lodged itself behind the anterior papillary muscle of the tricuspidal valve. On questioning the friends of the deceased, it turned out that last summer, when eating radishes in a garden, he had told them he believed he had just swallowed a thorn, and that he had for some time complained of a difficulty in the region of the cardia. By this preparation, the Museum of Pathological Anatomy of this University, which has been greatly enriched by the late Professor von Dittrich, has received another very valuable addition.

TURKEY.

CONSTANTINOPLE, July 12.

IN my letter of March 25 I gave you some account of the old curative art of the Native Doctors in this Empire; in this follow a few particulars on the European Medicine which has been transplanted into Turkish soil. I am unable to give the exact date when European Doctors first settled in the capital of the Ottoman Empire; but it is a fact, that between thirty and forty years ago the number of such residents here was limited to a very few persons, who called themselves qualified Physicians, with more or less right. The position of these representatives of modern European Medicine was far from enviable; for the population, distrustful of everything foreign, and closely adhering to old customs and prejudices, were very slow to admit the innovations and improvements of science. In order to explain to you the position of the Medical men, and how they have been enabled to obtain a footing here, I must first say a few words on the Apothecaries of this city.

If a foreigner passes through the Turkish quarters of the town, he must see a considerable number of small and rather mean-looking booths, the trade of the occupants of which is proclaimed by the rows of medicine-bottles exhibited there. The keeper, dressed in a dirty long-brown coat, which nearly reaches the ground, broad Oriental trousers, held together by a belt, a red cap, closely covering the skull, and fastened turban fashion round the head by a narrow coloured cotton handkerchief, with a long grey beard, hooked nose, and cunning eyes, is easily recognised as a Spanish Jew. These are the oldest apothecaries of Constantinople; they have, of course, no trace of chemical knowledge, and are merely acquainted with the drugs most commonly used, and very few have a faint notion of their action in the system. They do not, however, confine themselves to the sale of drugs, but they also prescribe them, and the people believing them to be Doctors, consult them in cases of disease; they receive patients in their booths, and visit them in their homes. No fee is paid for their attendance, and their source of gain lies in the remedies, with which they amply supply their credulous patients. The Turkish population especially has great faith in these quacks, nor is this confidence confined to the lower classes. Generally speaking, the same superstitions and prejudices pervade all classes of Mussulmans, as, in fact, the difference in their mental cultivation is very slight, which even now-a-days comprehends little more than writing and reading the Koran, and this is only understood by a few priests. A really liberal education is not even dreamt of. A

few exceptions are formed by such as have been educated in Western Europe, or are in constant intercourse with Europeans; but these only prove the rule, as such individuals are looked upon with distrust by persons of their own creed, and are not considered true Osmanlis. It is, therefore, no matter of astonishment to us, to see side by side in the booths of these Israelitic curers the veiled figure of the lady of the harem, and the lean black negress; the sturdy navvy close to the weakly and indolent effendi; the courageous soldier near the effeminate officer. Although the prescriptions of these quacks are generally confined to rather innocent vegetable remedies, they are in certain cases not deterred from giving strong minerals, among which sublimate is the most important. By this and the numerous venesections made in almost every case of acute disease, much mischief is done. This class of Apothecaries are the avowed enemies of Physicians, and they very rarely advise a patient to consult one of them.

Another class of Apothecaries here consists of Levantines, Greeks, and Armenians, who have acquired some pharmaceutical knowledge, and have furnished their shops according to Europeon fashion. The majority of these also exercise the practice of Medicine; and they are generally the first to be called to patients, especially in those parts of the town which are at any distance from Pera, the head-quarters of European Medicine. If the course of the disease does not inspire them with any misgivings, they retain the patient under their care, and only call in a qualified Physician if they scent danger. Many of these Apothecaries have acquired great reputation with certain classes of the population, especially in the Greek and Armenian quarters; they are often the regular attendants of the high Turkish dignitaries and rich Armenians, and several of them have amassed considerable fortunes.

The Physician, on his arrival in the metropolis of Turkey, meets with only one feeling on the part of the inhabitants—viz., a general distrust in his not yet tried powers: the scientific education and reputation he may have, are thought insignificant when compared to the arts of the native quacks. In civilized and enlightened nations Physicians are expected to administer such remedies, and give such advice in cases of disease, as are considered the best according to the then state of Medical science; not so a semi-barbarian people, who believe the Physician to be in possession of certain specific remedies against certain diseases, which are exclusively known to him; and thus it happens that an Apothecary, the ex-dragoman of a deceased colleague, and the most ignorant of quacks, is believed to know of a remedy of which the majority of Physicians are ignorant. Another circumstance very much against the scientific Physician is the fatalism of the natives, which, by constant intercourse, has spread to the Christian population. For instance, the hand of a certain Doctor is believed to be lucky (*ugurli*). The *ugur* (luck) which accompanies him, is not to be outweighed by any amount of art or science; the patient requires remedies, which he believes are prescribed by the Doctor by some fortunate intuition and the ministration of a blind fate.

The Physician generally obtains his first opportunity for exercising his skill through being praised by an Apothecary, who takes him to consultations, and recommends him to his customers; but it also happens that the Chemist warns them against him if he is not well disposed towards the individual in question. The favour of the Apothecary can only be procured by the Doctor on the condition that he does not compete with him in his Medical practice. Woe to the Doctor were he to hint to the patient that the Apothecary was no able Medical man! He would scarcely ever persuade him of this, and would most probably never see another patient in that quarter, for, in the intrigues which then follow, the Physician is sure to be beaten. This power of the Apothecaries in procuring practice to Doctors accounts for the custom of Physicians in search of patients sitting for hours in Chemists' shops, or migrating from one to another, in order to catch, if possible, a stray patient; so that one seldom enters a pharmacy without finding it occupied by several Doctors and a few quacks. It is only after the Doctor has for several years been thus dependent on the Apothecary, that he may begin to give up this derogatory way of doing business, and, confident in a more or less well-founded reputation, begin practice on his own account. It is only just to add that not all Physicians residing here have stooped to such degrading practices; but very few of the latter have succeeded in acquiring an extensive practice. The number of Doctors resident here has greatly increased of late, and there are now little short of 300 in practice. This would not be too large a number were they not compelled to share the practice with the countless quacks who infest this city. It therefore happens that the greater number of Medical men obtain a very scanty subsistence and many of them, after having for years waited in vain for better fortune, are obliged to seek it elsewhere.

Very lately, Dr. Edward Steggall, a promising young Physician, who was unfortunately induced to settle here during the time of the Crimean war, died of typhoid fever in very distressed circumstances. Almost all Medical schools are represented here, and besides English, French, Italian, and German Physicians, a large number of natives have been educated in European schools, and now share the practice with the foreigners who, a few years ago, reigned exclusively in the scientific Medical world. There are especially many Greek Doctors at Constantinople of whom only a few owe their knowledge to the University of Athens, the greater number having studied in Paris; others, after having first studied for some time in Paris, have graduated at one of the Italian schools; and a few have also studied at Vienna and Berlin. There are also a few able Practitioners amongst the Armenians.

Two circumstances have until now chiefly prevented the Native Doctors from attaining any eminence; first, the entire want of a general preparatory education at the commencement of their Medical studies; and, secondly, the love of gain, which governs them at the very onset of their career. Love of science is very rarely to be met with amongst them, and the Medical art is looked upon by them as one of the many trades by which money may be made in the great commercial emporium of the East; so long as they know sufficient to gain this end, they are satisfied. This is no exaggeration; for where can we find the name of a native who has distinguished himself by labours in any one branch of Medical science? It seems that the Eastern sky is not favourable to mental development, for even foreign Physicians resident here very easily fall into that mental torpor which characterises the Orientals.

AUSTRIA.

Vienna, July 15.

OVARIOTOMY AND ALCOHOL.

Two papers, by Dr. Althaus, of London, which were recently published in the *Wiener Medizinische Wochenschrift*, have excited much attention in the Medical world of Vienna. One of them treats on the results of ovariotomy in England, and was intended to induce German Surgeons to follow in the wake of their English colleagues regarding the performance of that operation, in which your countrymen, according to Dr. Althaus, have been so eminently successful. It was justly remarked, in the paper in question, that ovariotomy is even now regarded by most German Surgeons as an illegitimate operation, for which indications were just as deficient as for the extirpation of the spleen, which has recently been recommended by a Surgeon; and that to perform ovariotomy was equivalent to trifling with the patient's life. That this opinion is erroneous has now been amply shown to us, and there seems to be every prospect that our countrymen will endeavour to emulate in this respect the success of yours.

The other paper just referred to was on the therapeutical effects of alcohol, and the results obtained by this medication in England. The experience of Dr. Todd and the researches of Dr. Edward Smith were especially mentioned, and although it is certain that the general type of the disease in, and the climate of, your country, have an important bearing upon the results of the alcoholic treatment, there can be no doubt that in many instances alcohol and its different forms, which are now almost entirely neglected in this country, might be successfully administered here. The cases given by Dr. Althaus, and the strict boundary which has been drawn in his paper as to the indications and contra-indications of alcohol, will certainly do much to familiarise Medical men in Germany with this method of treating disease.

THE ANÆSTHETIC EFFECTS OF BELLADONNA.

In a case of incarcerated hernia recently operated upon by Professor Pitha, it was found that neither chloroform nor ether were able to induce a sufficient degree of narcosis. After the patient had inhaled a very large quantity of both these soporifics for about two hours, no anæsthesia had been induced, and enemata, with a scruple of the extract of belladonna, were then administered. Some time after that, the patient appeared to be in a state of deep intoxication; and herniotomy was then performed. The sopor resembled throughout a deep and tranquil sleep; the face was placid; the features calm, the respiration regular, the pulse good; neither spasms, contractions, nor paralytic symptoms were to be observed, and the only signs which excited some anxiety, were the excessive dilatation and immobility of the pupils and the absolute impossibility of rousing the patient. Neither the removal of the patient from the bed to the operating table, nor the operation itself, induced any return to consciousness; and it was not until twelve hours after the operation that the patient awoke. He had no recollection of anything which had passed, and with the exception of a slight scratching in the throat and dilatation of the pupils, all traces of the action of belladonna had disappeared. When he awoke (at three p.m., on a bright day) he believed it to be still night; but towards the evening of the same day the vision was entirely re-established. Professor Pitha thought that the anæsthesia was due to the combined action of the chloroform, ether, and belladonna; and he recommends a mixture of atropine and chloroform to be administered for inducing anæsthesia in cases of chloroform *réfractaires*.

ON THE TRANSMISSION OF SECONDARY SYPHILIS.

Professor Siegmund gives the following as the results of his observations on the transmission of secondary syphilis:—This takes place in a similar manner to that of primary syphilis; in the latter the pus of the ulcer is the infecting matter, in the former it is either pus or blood or exudation matter that infects. It is necessary for such transmission, that the infecting matter should enter wounded tissues and should remain there for some time; if the epidermis be entire, infection is not possible. During the first two weeks no essential changes are to be observed in the place where the infecting matter has been transmitted; in the third or fourth week, however, hyperæmia, infiltration, thickening of the tissues, suppuration, etc., are observed as the first symptoms of the transmission having taken place. A local disease always precedes the general form. It is only after such local phenomena that general symptoms in other tissues follow. From the third to the twelfth week infiltration, first of the neighbouring and afterwards of the more distant lymphatic glands; hyperæmia and infiltration of the skin and mucous membrane and a disturbance of the entire nutrition, and of the physical and mental condition of the patient take place. The succession of symptoms is pretty much the same, and periodical. The first essential symptom of the general diathesis is the infiltration of lymphatic glands in the whole system; if such is not present, we are not justified in assuming a syphilitic diathesis. The transmission of syphilis from parents to children is direct, as regards the mother; and indirect as regards the father; a transmission of it by the semen has not yet been proved.

GENERAL CORRESPONDENCE.

POOR-LAW MEDICAL REFORM ASSOCIATION.

LETTER FROM MR. GRIFFIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—As those of your readers who are Poor-Law Medical Officers will be desirous to know the result of the Medical Examination before the Select Committee of the House of Commons on Poor-law Relief, permit me to say that Dr. Fowler, Dr. Rogers, and myself, gave evidence on July 23, the last day of sitting to receive evidence this Session. I need not say that the time allowed us was utterly insufficient for the purpose, and had I not previously written out my evidence, and tendered it in bulk, the labour of six years would have been thrown away, as far as this Committee, at least, is concerned. On my name being called I took my place at a small centre table, one being in front, and one on each side of me, at which the Committee sat. I had rather a large bag of papers with me, some twenty or thirty quires of foolscap, which seemed to attract some attention, and ultimately was the cause of my downfall. The presiding Chairman, who is the President of the Poor-law Board, commenced with the question, "You are the Chairman of the Poor-law Medical Reform Association? I understand you complain of the present system under which Medical relief is afforded to the poor? Will you state, if you please shortly, what your objection to it is?"

My last reply was this, "I have come here prepared with a statement, which I wish to submit to the Committee, and I think it will save time in the end if I am allowed to proceed in my own way. The subject is a very extensive one, and although what I have to say may occupy some time, I will make my statement as short as possible." I then narrated the origin of the Poor-law Medical Reform Association. That 1780 Poor-law Medical Officers had sent me 4135 subscriptions, and that 129 Medical men, unconnected with Union practice, had sent me 158 subscriptions, the two together amounting to £1702 5s. 2d., in order to make known our grievances, and that the money was sent to me, trusting to my honour properly to make use of it. The President then stated, that many Medical men had written to the Poor-law Board, objecting to the plans proposed by me. To which I replied, I had no doubt such was the case, as some of the officers who were well off were afraid that on the adoption of a uniform system, a reduction of their individual salaries might ensue. I then pointed out the desirableness of defining the class of persons to be entitled to Medical relief, illustrating my views by cases which had occurred in the Weymouth, Cambridge, Birmingham, and Barnet Unions. The Bill introduced into Parliament by Mr. Pigott was commented on by the President, and I replied to his statement. The risibility of some of the Committee was excited by my remarks as to the necessity of pressure from without in order to carry any measure in Parliament, which was the course adopted sometimes by members themselves.

I was then questioned as to whether I was not the Editor of the *Poor-law Medical Journal*, but as I never heard of such a work, of course I replied in the negative, which however did not seem to satisfy the hon. questioner, as he declared he had seen the work. I then handed to him a pretty little volume of pamphlets issued by the Association, which I said I thought he might have mistaken for the work he named, as I had sent copies to the Members of Parliament; he then turned it over, and asked me if I thought Members of Parliament had nothing else to do than to read books like that? and if I wished them to be read I should condense my remarks. I explained the volume before him contained a series of pamphlets issued during the last six years, but now bound up together for convenience of reference. The hon. gentleman then cast his eyes on my unfortunate heap of papers, and declared that he would never consent to the money of the nation being spent in printing them, and then moved that the room be cleared. On our re-admission, I was informed the Committee had decided not to receive any more evidence from me; whether this Session was stated or not, I cannot recollect. I then mentioned the large mass of papers were in duplicate, and many petitions were for reference only; and it was subsequently arranged I was to deliver in that portion relating to my evidence, which was to be reduced as much as possible. An officer connected with the Poor-law Board then took charge of them, and we jointly stripped them of all superfluous parts, and other parts also; but I thought of the adage of the half-loaf, and therefore yielded. And I must honestly own I had no just cause to complain, as I have already received fifty-four proof pages of my evidence, and I expect a large number of Tables will be added as an appendix.

Dr. Rogers was then called; and after about ten minutes' examination, his evidence closed.

Dr. Fowler followed; and at the end of twenty minutes the clock struck four, and he was informed if he had any papers he wished to deliver in, he could do so. And thus ends, for the present, at least, the Parliamentary inquiry into a subject involving the interests of four millions of the labouring classes, the whole of the ratepayers, and a million and a-quarter of the sick poor of this kingdom.

I trust the Committee may be induced to read the evidence

delivered in; should they do so, their report will doubtless be in favour of considerable changes, even though the Poor-law Board may be unwilling to adopt such a course. The President said "we must expect a limit being put to our appointments." Now, the only way for us successfully to oppose such a course, is to act unitedly, and have ample funds at command, without which the Association is powerless. Dr. Fowler stated he represented 170 Metropolitan Poor-law Medical Officers, which proves we are a divided body,—a most dangerous position to occupy. Dr. Fowler asked for 2s. 6d. a patient; Dr. Rogers for 2s. a patient. I asked for 5s. a patient for the first 300 cases, with mileage; and for all above that number, 2s. a patient with mileage and extra Medical fees as agreed on and entered in our last Draft Bill.

This division amongst us ought not to exist, and if persisted in, must be fatal to our cause. Allow me to quote a part of Lord John Russell's speech to the Electors of the City of London last week, as it is very applicable to our present position:—

"Why should not men, though there may be degrees of difference between them, co-operate when there is a great cause before them, and a great battle to be won? We may all receive a lesson in this respect, I think, from the institution which has lately sprung up among us—our Volunteers; you may find among them one man who would like to march a little faster, and another man who would like to march a little slower; but they are told that without order and without discipline, unless they all march in time and at the same pace, they will be useless to their country, and by no means formidable to their enemy. So it should be with regard to Reformers; some are in a hurry, and would wish to march at the quickest pace possible; others are more cautious, and would like to pick their way through the stones and the other obstacles they may meet with; but all should act with union and discipline, and in that way, and that way alone, will they present a front which cannot be broken, and with which they may march from triumph to triumph."

I am, &c. Richard Griffin.

12, Royal-terrace, Weymouth, July 29.

SYPHILITIC AFFECTION OF THE CRANIUM AND DURA MATER—HEMIPLEGIA OPPOSITE TO THE SEAT OF DISEASE.

Letter from Dr. Mushet.

[To the Editor of the Medical Times and Gazette.]

Sir,—J. S., aged 44, a groom, single, was admitted into the St. Marylebone Infirmary on November 14, 1856. He had enjoyed good health until twenty years previously, about which time he contracted syphilis in Canada, and had the disease very badly. His nose was affected, and pieces of bone came away, and also from the sternum. After two or three years, he was sent home invalided from the Hospital. About the year 1851 or 1852, his knee became swollen and painful, and abscesses formed. It improved at length, so that he was able to walk about, but finally became worse, and the limb was amputated about seven months before his admission into the Infirmary. Two or three months before its removal, an opening appeared over the right brow, and soon afterwards a nodule (node) on the upper part of the frontal bone. He had not experienced much pain in the head or had any fit before admission. When admitted, he had a dull, heavy, sensual aspect, old scars over back. Not much headache or pain in cranium; answered questions heavily. There was an opening over the right palpebra leading to the bone, and a distinct node on the upper part of the right frontal bone. He was ordered iodide of potassium in decoction of cinchona, and good diet.

On November 20 he was attacked with hemiplegia of the left side, but was not altogether insensible. He could protrude the tongue, which was red and fissured; articulation was imperfect; the mouth deviated. He gradually became worse and comatose, and died on December 12.

Autopsy, Three Days after Death.—The head only was examined. Scalp thin; calvarium moderately thick; a fibrous nodular mass over right frontal eminence, firm on section, corresponding to the node observed during life. A portion of the frontal bone from the upper margin of the right orbit, to about an inch over the forehead was denuded of pericranium, and dead. The line of separation between the dead and living bone being well defined. The necrosis involved the outer table only. On removal of the calvarium, the dura mater over the side of the right anterior cerebral lobe, presented a fibrous mass embedded in its substance, similar to the one described outside the skull, about the size of a shilling and half-an inch in thickness. Another deposit of the same character existed over the top of the right anterior lobe, causing a bleeding of the dura mater and brain-substance, and rendering their separation very difficult. There was some amount of subarachnoid effusion. Brain-substance appeared to be of normal consistence, but the white matter presented increased vascularity. No abscess or circumscribed inflammatory appearance in brain; no opacity of the arachnoid; no fluid in ventricles; about an ounce at base of skull; the veins at base, prominent and full of dark blood.

I am, &c.

William Boyd Mushet, M.B. Lond.,
Late Resident Physician of St. Marylebone Infirmary.

Moore-park House, Fulham, July 29.

ACCIDENT ON MONT BLANC.

Letter from Mr. Moore.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have this day received a letter (dated 19th inst.) from my friend Dr. Metcalfe, of Geneva, containing his account of an accident to which he was called last week, and which from the remarkable character of the symptoms will no doubt be interesting to your readers.

I am, &c.

York, July 22. Oswald A. Moore.

A party ascending Mont Blanc, consisting of Messrs. H., B., and others, all first-rate mountaineers, with their guides, had slept out all night, and after breakfast Mr. B. left the others for a few minutes, being on a slight slope near a precipice. In returning to the party Mr. B. slipped, fell on his back and then over. He slid down 1500 feet at an angle of 45° by measurement, and at a velocity of not less than sixty miles an hour, over frozen snow covered by little peas of ice like hail, and being brought up at a crevasse by the collected snow in his clothes; this owing to the arrangement of his dress at the time of the accident (his trousers down), which no doubt saved him, by tying his legs together. Dr. Metcalfe was sent for to St. Gervais late that night, and arrived there at six a.m. the following morning. He found Mr. B., a young gentleman of 19, in a state of collapse, wrapped in cold wet sheets, which were at once removed and restoratives given until reaction set in. Sensible; no alteration of the pupil; face looking like that of a man four or five days in the water, covered with blood, much swollen; skin off the right side of the nose and face; forehead abraded; hands burnt black on the backs, swollen, the fingers as as if the ends were ground down on a coarse grindstone; nails all right; arms and elbows clear from wounds but bruised from under the left arm to the ankle; the side scratched in every direction, as if with a sharp curry-comb, the right side not marked so high; the calf of each leg on the outside is fairly burnt black and dead, back of the calf unhurt; nates burnt off by the friction, and sides of the thighs the same, these parts being red or white. Not much pain in any part, and after reaction came on, but little wandering. Pulse from 0 got to 120, weak, thready, intermittent; stupor considerable; memory good; head not affected beyond what any severe shock would cause. Diarrhœa came on with much irritation, frequent micturition, urine copious, dark, clear; thirst great; tongue white, pale. There was no blame attributable to anyone. He fell at 7 a.m. and was got to St. Gervais at 6 p.m., after a most perilous carriage on a portable sledge. No bone broken. Dr. Metcalfe has been unremitting in his attention, and informs me that he is doing well and in a few weeks will probably be all right, and not marked or injured in any visible way. He is sensible, and has been up already. This is a very interesting example of a severe "brush-burn," and the consequent shock to the system.

REPORTS OF SOCIETIES.

ROYAL SOCIETY.

June 6, 1861.

A Paper, by Thomas Graham, Esq., F.R.S., Master of the Mint, was read, on

LIQUID DIFFUSION APPLIED TO ANALYSIS.

The unequal diffusibility of different substances in water appears to present means of separation not unlike those long derived from unequal volatility. For as regards diffusion, there exists a "volatile" and also a "fixed" class of substances; and these distinctions appear to correspond with differences in molecular constitution of a fundamental nature. Much value is attached to diffusion, as affording the means of bringing out clearly, and subjecting to numerical expression, the distinctive properties of what appear to be two great divisions of chemical substances. The first, or *diffusive* class of substances, are marked by their tendency to crystallize, either alone or in combination with water. When in a state of solution they are held by the solvent with a certain force, so as to effect the volatility of water by their presence. The solution is generally free from viscosity, and is always sapid. Their reactions are energetic and quickly effected. This is the class of *crystalloids*. The other class, of low diffusibility, may be named *colloids*, as they appear to be typified by animal gelatine. They have little if any tendency to crystallize, and they affect a vitreous structure. The planes of the crystal with its hardness and brittleness are replaced in the colloid by rounded outlines with more or less softness and toughness of texture. Water of crystallization is represented by water of gelatination. Colloids are held in solution by a feeble power, and have little effect on the volatility of the solvent. They are also precipitated from their solution by the addition of crystalloids. The solution of colloids has always a certain degree of viscosity or gumminess, when concentrated. They appear to be insipid or wholly tasteless, unless when they undergo decomposition upon the palate and give rise to sapid crystalloids. Their solid hydrates are gelatinous bodies. They are united to water with a force of low intensity; and such is the character of the combinations in general between a colloid and a crystalloid, even although the latter may be a powerful reagent in its own class, such as an acid or an alkali. In their chemical reactions, the crystalloidal appears the energetic form, and the colloidal the inert form of matter. The combining equivalent of the colloid appears always to be high, and it has a heavy molecule. Among the colloids rank hydrated silicic acid, and a number of soluble hydrated metallic peroxides, of which little has hitherto been known; also starch, the vegetable gums and dextrin, caramel, tannin, albumen, and vegetable and animal extractive matters. The peculiar structure and chemical indifference of colloids appear to adapt them for the animal organization, of which they become the plastic elements. Although the two classes are widely separated in their properties, a complete parallelism appears to hold between them. Their existence in nature appears to call for a corresponding division of chemistry into a crystalloid and a colloid department. Although chemically inert in the ordinary sense, colloids possess a comparative activity of their own, arising out of their physical properties. While the rigidity of the crystalline structure shuts out external impressions, the softness of the gelatinous colloid partakes of fluidity, and enables the colloid to become a medium for liquid diffusion, like water itself. The same penetrability appears to take the form of a capacity for cementation in such colloids as can exist at a high temperature. Hence a wide sensibility on the part of colloids to external agents. Another eminently characteristic quality of colloids, is their mutability. Their existence is a continued metastasis. A colloid may be compared in this respect to water while existing liquid at a temperature below its usual freezing-point, or to a supersaturated saline solution. The solution of hydrated silicic acid, for instance, is easily obtained in a state of purity, but cannot be preserved. It may remain fluid for days or weeks in a sealed tube, but is sure to gelatinize at last. Nor does the change of this colloid appear to stop at that point; for the mineral forms of silicic acid, deposited from water, such as flint, are found to have passed, during the geological ages of their existence, from the vitreous or colloidal into the crystalline condition (H. Rose). The colloidal is, in fact, a dynamical state of matter; the crystalloidal being the statical condition. The colloid possesses *energia*. It may be looked upon as the probable primary source of the force appearing in the phenomena of vitality. To the gradual manner also in which colloidal changes take place (for they always demand time as an element), may the chronic nature and periodicity of vital phenomena be ultimately referred. For the separation of unequally diffusive crystalloids from each other, jar-diffusion was had recourse to. The mixed solution was conveyed by means of a pipette to the bottom of a column of water contained in a cylindrical glass jar. A kind of echobation takes place, a portion of the most diffusive substance rising and separating from the less diffusive substances, more and more completely, as it ascends. The separation of a crystalloid from a colloid is more properly effected by a combination of diffusion with the action of a septum composed of an insoluble colloidal material. Animal membrane will serve for the latter purpose, or a film of gelatinous starch, hydrated gelatin itself, albumen or animal mucus. But by much the most effective septum used was paper, as it is metamorphosed by sulphuric acid (Gaine). It is now supplied by Messrs. De la Rue, and has become familiar under the name of "vegetable parchment" or "parchment-paper." From sheet gutta-percha a flat hoop is formed, eight or ten inches in diameter by three inches in depth, and one side is covered by a disc of parchment-paper, so as to form a vessel like a sieve. A mixed solution, which may be supposed to contain sugar and gum, is placed upon the septum to a depth of half an inch, and the instrument then floated upon a considerable volume of water contained in a basin. Three-fourths of the sugar diffuses out in twenty-four hours, and so free from gum as to be scarcely affected by subacetate of lead, and to crystallize on the evaporation of the external water by the heat of a water-bath. The unequal action of the septum, which causes the separation described, appears to depend upon this:—The crystalloid sugar is capable of taking water from the hydrated colloidal septum, and thus obtains a medium for diffusion; but the colloid gum has little or no power to separate the combined water of the same septum, and does not therefore open the door for its escape by diffusion, as the sugar does. This separating action of the colloidal septum is spoken of as dialysis. Dialysis was applied to the preparation of various colloids. The mixed solution obtained by pouring silicate of soda into water acidulated with hydrochloric acid, was placed upon a parchment-paper dialyser and allowed to diffuse into water, the latter being occasionally changed. After the lapse of five days seven-eighths of the original silicic acid was found to remain liquid upon the septum, and to be so free from hydrochloric acid and chloride of sodium as not to give a precipitate with acid nitrate of silver. The true hydrated alumina, and also Mr. Crum's metalumina, were obtained soluble by dialysing solutions of these oxides in the chloride and acetate of the same metal. So, also, the hydrated peroxide of iron, in addition to the hydrated metaperoxide of iron of M. Péan de Saint Gilles, and the soluble hydrated chromic oxide. The varieties of Prussian blue are obtained soluble by dialysing their solution in oxalate of ammonia, the latter salt diffusing away. Stannic and titanic acids appear as insoluble gelatinous hydrates. A solution of gum-arabic (gummate of lime), dialysed after an addition of hydrochloric acid, gave at once the pure gummic acid of Frémy. Soluble albumen is obtained in a state of purity by dialysing that substance with an addition of acetic acid. Caramel of sugar purified by repeated precipitation by alcohol and afterwards by dialysis, contains more carbon than any of the caramelic bodies of Gélis; it forms a tremulous jelly when concentrated, and appears decidedly colloidal. Caramel, like all other colloids, has a soluble and an insoluble modification. The latter has its solubility restored by the action of alkali, followed by that of acetic acid and subsequent dialysis. Dialysis proves highly useful in separating arsenious acid and metallic poisons from organic fluids. Defibrinated blood, milk, and other organic fluids charged with a few milligrammes of arsenious acid, and placed upon the dialyser, were found to impart the greater proportion of the arsenious acid to the external water in the course of twenty-four hours.

The diffusate was so free from organic matter, that the metal could be readily precipitated by sulphuretted hydrogen, and the quantity weighed. Ice, at or near its melting-point, appears to be a colloidal substance, and exhibits a resemblance to a firm jelly in elasticity, the tendency to rend, and to redintegrate on contact. The consideration of the properties of gelatinous colloids appears to show that osmose is principally an affair of the dehydration of the gelatinous septum under influences having a catalytic character, and that the phenomenon is independent of diffusion. The colloidal septum is capable of hydrating itself to a higher degree in contact with pure water than in contact with a saline solution. Colloidal septa, swollen in consequence of contact with dilute acid or alkali, appear to acquire increased sensibility to osmose, in consequence of their unusually high degree of hydration.

MEDICAL NEWS.

Royal College of Physicians of London.—At the Comitia Majora held on Tuesday, July 30, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine and Midwifery, were duly admitted to practise Physic as Licentiates of the College :—

Andrews, Charles, M.D., Hammersmith
Bell, Thomas, Uppingham
Cargill, Jasper, M.D., Bloomsbury-street
Norris, George Abbott, M.D., Maze-pond, Southwark.

The following gentlemen passed the Preliminary Examination in the subjects of General Education, on the 24th ult:—

Bostock, Edward Ingram, St. Bartholomew's Hospital
Chandler, Edward, Kennington
Elliot, Richard Luscombe, St. Bartholomew's Hospital
Moore, Harry Gage, Guy's Hospital
Williams, Thomas Edward, St. Bartholomew's Hospital
Wilson, Moreton Stephenson Wightman, Rugeley
Worsley, James Henry, Bury, Lancashire
Wright, Thomas Poyntz, Tiverton, Devon.

Royal College of Surgeons of England (a).—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 25th ult., and when eligible will be admitted to the Pass Examination. (This is the last Court this Session.)

Allkin, William J.
Braine, Robert
Cooper, A. A. C.
D'Urminy, B. F.
Hoff, George F.
Jones, Robert
Jones, John Robert
King, Francis
Lilly, Hubert Waller
Mallet, Stanley Edwin
Millership, A.
Moore, E. H.
Murdoch, William
Pigott, Paynton
Richard, R. A. C.
Shearwood, J. H.
Will, Alexander.

The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted Members of the College, at a Meeting of the Court of Examiners on the 30th ult. :—

Ahern, William, Limerick
Bonner, William James, Minehead, Somerset
Catt, Charles Varrall, Brighton
Charter, Sidney, St. Dunstan's-hill, City
Colquhoun, Archibald Grant, Corsham, Wilts
Cotton, George Poley, Dover
Harris, Hasler, Gower-street, Bedford-square
Holden, George Herbert, Worcester
Hughes, David Watkin, Rnthin, North Wales
Keegan, Denis Francis, Dublin
Kempe, Charles Marshall, Clapham-road
Maughan, Samuel, Great Grimsby, Lincoln
Mayo, Charles, Winchester
Morton, Thomas Henry, London
Potts, Walter Jeffery, Barnstaple, Devon
Roberts, Frederick Thomas, Carmarthen
Rogers, William Goddard, London
Scott, William Herbert, St. Mary's Hospital
Selwood, Henry Corpe, Great Percy-street, Pentonville
Smith, Joseph, York
Taylor, William George, Kilmeston, Alresford, Hants
Walford, Walter Gilson, Sittingbourne, Kent
Watson, Christopher, Dublin.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, July 25, 1861 :—

Appleyard, James, Cleethorpes, Grimsby
Bonnor, William James, Minehead, Somersetshire
Cookson, Samuel, Needham Market
Davies, Richard Lewis, Welshpool, Montgomeryshire
Gibson, Daniel, Waverly-street, Hull
Hope, William
Mason, John Wallis, Upper Marylebone-street
Parsons, Frederick James
Phillips, George Bagster
Pocock, Crawford John, Brighton
Simmons, Benjamin, Henley-on-Thames
Simpson, Frank, Whitby, Yorkshire
Stone, William Domett
Wallis, Albert William, Orsett, Essex
Young, Henry James, Bath.

The following gentlemen also on the same day passed their First Examination :—

Booth, Lionel, Greenwich
Flower, Frederick Isaac, Codford, St. Peter's, Wilts.
Jones, John, Chatteris
Leeds, Thomas, Manchester
Pick, Thomas Pickering, Waterloo, near Liverpool
Pitt, Charles Wightwick, Malmesbury, Wilts.
Shillitoe, Richard, Hitchin, Herts
Tomlinson, Philip Richard, London
Willes, Joseph, Brighton.

APPOINTMENTS.

Murray.—Mr. Henry Murray has been elected Surgeon to the Fannatt Dispensary, County Donegal, vacant by the death of Dr. Baldrick.

Partridge.—Joseph Henry Partridge, M.R.C.S. Eng., L.S.A. Lond., has been appointed Surgeon to the Essex and Colchester Hospital, in the room of Mr. Alderman Partridge, resigned.

DEATHS.

Connon.—July 17, William Connon, Assistant Medical Officer at the Durham County Lunatic Asylum, Sedgefield, Ferry-hill, Durham, aged 25.

Freeman.—July 23, Richard Freeman, of Princess-square, Plymouth, M.D University of St. Andrews, M.R.C.S. Eng. (in practice prior to 1815), aged 68.

Hollister.—July 23, George Moore Hollister, of Newent, Gloucestershire (in practice prior to 1815), formerly Surgeon, Royal Navy, aged 75.

Martin.—July 26, John Martin, of Merthyr Tydvil, Glamorganshire, M.R.C.S. Eng , L.S.A. Lond., aged 52.

MacLoghlin.—July 23, Edward Peter MacLoghlin, Rathmullen, Strabane, County Donegal, formerly of Collon, County Louth, F.R.C.S. Ireland, M.R.C.S. Eng., L.A.H. Dublin, aged 50.

Royal Medical Benevolent College, Epsom.—The late Mr. Robert Forest, of Clapham, has bequeathed the munificent sum of £5000 to this Institution, for the purpose of founding Scholarships at the Universities to be competed for by the pupils.

A Wooden-Leg Fund.—A benevolent individual, Mr. Bowditch, of New York, has left 5000 dollars to the Massachusetts General Hospital, as a fund to be called the Wooden-Leg Fund, the income to be applied towards defraying the expenses of wooden legs for patients, who have been obliged to submit to amputation—females and young patients to have the preference.

New Chair of Zootomy in the Vienna University.—It has been resolved to establish a Chair of Zootomy in the Vienna University, and Dr. Carl Brühl, formerly Professor of Zoology and Comparative Anatomy at Pesth, has been appointed to fill it.

Professor Dummreicher, of Vienna.—The life of this Surgeon has been placed in the greatest peril in consequence of a wound he received while practising operations upon the dead body. He has lost the forefinger of his right hand,—a serious loss indeed for a Surgeon,—but the gangrene has now ceased to spread, and reasonable hopes of recovery are entertained.

Increase of Population in April, May, and June, 1861.—The increase of population, as disclosed by the registers of births and deaths, was 76,997, for to that extent the former exceeded the latter. The rate of increase was equal to 846 daily.

Académie des Sciences.—The decease of Rathke having rendered vacant a place in the list of Correspondents of the Section of Anatomy and Zoology, the following candidates were presented to the notice of the Academy:—MM. Purkinje, of Breslau; Dana, of New Haven; Delle

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

Chiaje, of Naples; Siebold, of Munich; and Van-Beneden, of Brussels. M. Purkinje was elected by the votes of forty out of forty-one Academicians.

THE INDIAN FAMINE.—Colonel Smith furnishes many details suggestive of the utter desolation produced by this Famine, but admits that trustworthy "vital statistics" cannot be obtained. But the most striking evidence is that of the Civil Surgeon to the Relief Hospital of Meerut. Of the patients admitted there, he says,—"They were one and all starving, and the majority were skeletons from atrophy . . . . . ill-nourished and poor-blooded." Nor was this all. He confirms Colonel Smith himself in testifying to the profound mental depression and despair that had possessed the whole population. The *Times* adds very truly:—"When we consider how large a part of the ordinary Hindoo peasants belong to that class which is but one degree removed from starvation, and cannot, consistently with life, reduce their daily subsistence by a single ounce, we may form some idea of what the mortality must have been."

LORD CAMPBELL'S BRAIN.—The London Correspondent of the *Kerry Star* says of the body of Lord Campbell that "the brain was of considerable size and remarkably healthy, its weight was fifty-three ounces and a quarter; the heart was considerably hypertrophied (enlarged) with atheromatous deposits in the valves of the aorta, commonly known as valvular disease of the heart—the right side of the heart was quite empty, but the left side was full of blood. The liver was enlarged and full of cysts. There are only two cases on record of brains being larger than that of the late High Chancellor of England; the first is that of Cuvier, the great naturalist, whose brain weighed fifty-nine ounces four drachms, and thirty grains; the next is that of Dupuytren, the famous French Surgeon, but in both these cases the brain matter was found in a state of disease. The general weight of the brains of male adults in Europe varies from forty to fifty-two ounces, and the brains of females are usually four to eight ounces less in weight than those of males, and it is singular to observe that there is not one on record of a female brain weighing more that forty-eight ounces. Here, in England, the brains of the Southern population are much smaller than those of the North. I learned a short time since that a very large hat manufacturer in London sends all his large hats to the North of England for sale. Another peculiar circumstance regarding this cerebral development is, that on the North-east of Scotland the brain-matter is in much greater abundance with individuals residing in those localities than, not only the other parts of Scotland, but of anywhere else. Now old Campbell, as well as Sir David Wilkie, and others of great mental capacity, were natives of Fifeshire."

THAT most excellent Charity "The Essex and Herts Benevolent Medical Society," held its eighty-fifth Anniversary at the Albion Tavern, Aldersgate-street, on Monday, July 15. The Courts of Audit, through a course of judicious management, have been anxiously endeavouring to carry out the generous views of the founders in 1786. Increasing from time to time, as its funds would permit, the annuities to the objects which have through that long series of years become dependent upon it, perhaps £30,000 may be the sum thus disposed of, leaving a considerable sum as capital stock for future emergencies. We cordially congratulate its members, the Court of Audit especially, upon their successful philanthropy. And we take this opportunity, adopting the words of the address prefixed to the annual statements, and to which we would call general attention, to advise young Professional men to reflect upon "the uncertainty both of life and success. By joining this Society, they will naturally feel comfort in the consideration of its being in their power, at a small annual expense, to lessen the miseries to which their wives and children are liable to be exposed after their decease. Those who may be enabled to bequeath wealth to those they may leave behind them, will have an opportunity of testifying their gratitude to that Profession in which it has been acquired." We hope, therefore, to see an increase from this its legitimate source.

THE INDIAN MEDICAL SERVICE.—We are glad to acknowledge the valuable aid of the *Saturday Review* in our efforts to obtain justice for Indian Medical Officers. The following remarks from an excellent article will be read with interest:—"In every service the Medical Officers are apt to be the victims of the proverbial 'monkey's allowance.' They rise only by merit, and, therefore, they have no powerful friends to defend them. They have no opportunity of performing splendid deeds of heroism, and, therefore, they have no newspaper renown to bring them before the public eye. They have in their hands none of the ordinary screws by which an injured interest squeezes justice out of a Government. They are, therefore, very much underpaid, both in proportion to their merit and to their usefulness. But, in the Indian army, where they are peculiarly necessary, they are, of course, peculiarly neglected. The pay and rank of Medical Officers in both the English and the Indian army have recently been raised, official eyes having no doubt been opened to the necessity of good Doctors by finding that our soldiers in the Crimea died for want of them. But for some reason known only to the authorities, the Indian Medical Officers have received only a very stinted share of the succour that has been extended to their English brethren. Possibly it is due to that triangular duel which is always being fought upon the military administration of India between the Horse Guards, the War Office, and the India Office, and which is a striking illustration of the advantages of having got rid of 'double Government.' Whatever its cause, its results are a contrast between the two services that is both mortifying and unjust."

SURGICAL INSTRUMENTS.—We are very glad to find that Her Majesty's Commissioners for the International Exhibition of 1862 are devoting attention to the exhibition of a most valuable class of objects, not very adequately represented at the Exhibition of 1851. On that occasion the case of French exhibitors of Surgical Instruments was the admiration of every one taking an interest in the subject. It is to be hoped that the trade generally, one of the most influential of England's industries, will in 1862 make such arrangements as may tend to attract equal attention to the objects they exhibit as was shown to the admirably-arranged cases of Surgical instruments and appliances exhibited by MM. Charrière and others in 1851. We understand that the Metropolitan trade is represented by a Committee composed of Messrs. Williams, Coxeter, Simpson, Matthews, Rein, Bigg, Grossmith, Ferguson, Hallam, Harnett, and Gabriel. The National Surgical Committee inform intending exhibitors in all parts of the country that "they are prepared to receive and consider applications for space, and otherwise to co-operate with and facilitate the views of intending exhibitors. The action of the Committee extends not merely to the advantageous exhibition of the ordinary trade productions comprehended under the head 'Surgical Instruments,' but also of apparatus, appliances, and inventions of every description having relation to the science of Medicine, or employed in the investigation and treatment of disease. The Committee trust that in the interest of the branch of industry they represent, the Medical journals will be good enough to give as extended a publicity to their intentions as possible." We are most happy to acquiesce in the suggestion contained in the last paragraph of the above circular.

EXHIBITION OF SURGICAL INSTRUMENTS IN 1862.—The second meeting of the Surgical Committee of the International Exhibition for 1862 was held at the offices of Her Majesty's Commissioners in the Strand, on July 24, Mr. Lawrence in the chair. The members present were Mr. Arnott, Inspector-General Dr. Bryson, Mr. Haden, Mr. Cæsar Hawkins, Deputy-Inspector-General T. Longmore, Professor of Military Surgery, Mr. Luke, and Mr. South. Dr. Bryson and Professor Longmore have been added to the names of the Committee already published by Her Majesty's Commissioners, as representatives of the Medical Departments of the Army and Navy, on the nomination of the Admiralty and Secretary of State for War.

AT a General Meeting of the Metropolitan Association of Medical Officers of Health, Dr. Aldis in the Chair, the following Report was read from the General Purposes Committee:—That the Association has held three quarterly and six evening meetings during the year; the evening meetings have been successful in eliciting interesting discussions on different sanitary topics. The first evening was occupied by a discussion on Bakers' Bakehouses and Bread, opened by Dr. Druitt. The second and third meetings were engaged in discussing

the Sanitary Condition of Public Schools, the subject being introduced by Mr. Chadwick, C.B. A Memorial was addressed to the Commissioners of National Education by resolution of this third meeting. The fourth and fifth evenings were occupied by a discussion on the best means of preventing the Entrance of Sewer Air into Houses, opened by Dr. Sanderson; at this meeting Mr. Lovegrove, surveyor, exhibited his Apparatus and Trap for Drainage. At the sixth meeting Mr. John Taylor, jun., explained the construction of his New Patent Smoke-consuming Grates and his Patent Walls for excluding Damp, and Mr. Knipple exhibited models of his patent system of Self-acting Perpetual Drainage. During the winter your Committee investigated an outbreak of disease at West Ham, brought under their notice by Mr. Elliott and Dr. Ansell; a Report was presented to one of the General Meetings on the subject. Representations have been made to the Home Secretary and other influential Members of Parliament on the Metropolis Local Management Amendment Bill, with the view of getting clauses introduced to secure sufficient open space at the rear of newly-erected buildings and to enable Local Boards to compel owners of property to supply dwelling-houses with water in districts beyond the reach of the mains of any Water Company. The Committee have been in communication with the Registrar-General in reference to the Census, with the purpose of obtaining the statistics of the several districts of the Medical Officers of Health. The Registrar-General has offered to allow any Officer of Health to extract from the books at the Central Office, as soon as he has done with them, such particulars as he may require for his own district. In the mean time he is willing to furnish to any member of the Association, who may desire it, the population and number of houses in each enumeration district, together with the plan on which the several Registration Districts were subdivided for the purpose of enumeration. The question of establishing a Museum of Sanitary Appliances has been under the consideration of your Committee as well as of endeavouring to secure space for an exhibition at the International Exhibition of 1862.

State of the Public Health.—The number of deaths in the quarter that ended June 30 was 107,721; in the same period of last year it was 110,878. The annual death-rate for the quarter was 215 to 10,000 persons living, while the average is 221. Both town and country populations have enjoyed a slightly improved degree of health; for dividing England into two portions, one chiefly urban and little inferior in amount of population to the other chiefly rural, it appears that the rate of mortality in town was 228 per 10,000 (against an average of 237), and that in the country it was 203 against 205. In either instance the result of comparison is on the side of salubrity, though as regards the country the degree of improvement is almost imperceptible. The difference in the rates of country and town during last quarter may be stated thus:—Taking equal populations, for 203 persons who died in the former, 203 + 25 died in the latter. If the rate of mortality that is found to rule in the least unhealthy districts had prevailed last quarter throughout England, the total deaths enumerated would have been, not 107,721, but 85,823. Consequently, a certain portion of the registered mortality may be termed unnatural, and is represented by 21,898 deaths. This large contribution levied on human life is to a great extent the penalty paid for ignorance or neglect of those social arrangements which it is the business of sanitary reformers to invent and to recommend.

VITAL STATISTICS OF LONDON.

Week ending Saturday, July 27, 1861.

BIRTHS.

Births of Boys, 926; Girls, 878; Total, 1804.
Average of 10 corresponding weeks, 1851-60, 1578·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	621	586	1207
Average of the ten years 1851-60	568·6	535 7	1104 3
Average corrected to increased population..	..	..	1214
Deaths of people above 90	1	3	4
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa
West'.. ..	463,269	..	10	1	1	7	3	33
North ..	618,181	..	1	5	2	13	4	46
Central ..	377,794	..	1	3	1	13	5	32
East	570,898	1	2	4	6	10	6	42
South ..	772,892	3	3	7	1	19	5	47
Total.. ..	2,803,034	4	17	20	10	62	23	200

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Anderson's Eleventh Paper has been received.

Dr. Figg's Note was omitted last week accidentally.

Inquirer may find all the information required as to Azoturia in the works of Thudichum, Golding Bird, and Prout.

Mr. Terry has quite misunderstood the article in question. Our object is simply to make the Association a more useful body than it has been of late; not to disparage it. We differ in opinion with Mr. Terry; but we do not suppose that his opinion is influenced by any other than upright motives, and we would advise him to be equally charitable.

We are compelled to defer an account of the last day's meeting of the British Medical Association at Canterbury until next week.

A Student.—Varicocele is easily curable by metallic ligature of the veins.

Lambda.—In reply to the inquiry respecting the books to be used in preparation for Examinations of the University of London, it is known that the Senate purposely abstains from naming any special Treatises on the subjects prescribed; but we have no doubt that for the Mechanical and Natural Philosophy, Golding Bird's Manual will most fully suffice, and for the Zoology, we should think Dallas's volume in Orr's Circle of the Sciences the most suitable. As all Medical Students attend Lectures in Chemistry and Botany, there would seem no occasion to name books for these subjects; but the Manuals of Fownes and Henfrey would supply any want. The questions contained in the Calendar of last year on Zoology and Botany, at the First Bachelor of Science Examination, with which the Preliminary Scientific in part coincides, will serve as a guide to what is required. Candidates should be led to acquaint themselves practically with the objects on which they are liable to be examined, so as not to take the skull of a sheep for one of a carnivorous animal, or to fail in assigning a common star-fish or coral to its proper place in the Zoological series.

Errata.—Page 80, column 2, line 7 from bottom, *for* "This range" *read* "His range." Page 81, column 1, line 30 from top, *for* "powers of accommodation" *read* "power."

University of London Examination.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am one of fourteen rejected, solely for Botany, at the recent Preliminary Scientific Examination at Burlington-house. I am told, in the explanation given in your columns last week, that the Examiners under the new regulation have determined to exercise more stringency in regard to Botany than heretofore.

May I ask, 1. Is it fair that we who matriculated under the old system should be rejected for a subject for which the Examiners, acting under the new regulation, have made the standard higher? 2. Was any intimation given either to the Lecturers or students of the various Hospitals, that the Examiners had intended to make this alteration?

The Examiners allege as an excuse for giving plants to describe which were not in the prescribed orders, the impracticability of obtaining sufficient specimens. Most of our names were entered on Friday, July 12, the Botanical Examination was on Thursday, July 18; surely the Examiners might have obtained the required number of specimens during the interval (four days, exclusive of Sunday). I am, &c.

July 31. FAIR-PLAY.

Advertising by Circular.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—We very properly consider the Practitioners of Homœopathy and other quackeries as without the pale of the Profession, but there are unprofessional acts of those who claim and hold an honourable status amongst their brethren, which deserve to be held up to public obloquy. I hand you a printed advertisement which has been extensively circulated in this neighbourhood by Dr. Evans—who, I believe, rightly styles himself Inspector of Hospitals, and Honorary Surgeon to the Queen.

Verily, we poor civilians are not likely to derive much credit from the infusion of the military element into our ranks, if this gentleman be a fair specimen of his cloth. I am, &c.

Lee-park, S.E., July 30. JOHN M. BURTON.

"Dr. Evans, Member of the Royal College of Physicians of England; M.D. King's College, Aberdeen; Inspector-General of Hospitals and Fleets; and Honorary Surgeon to the Queen; has the honour to announce to the nobilty, gentry, and inhabitants of Woolwich, Charlton, and their vicinities, that having retired from the public service, after thirty-three years' servitude in the Royal Navy, twenty-two years of which he had charge of different Hospitals both at home and abroad; he now intends to practise his profession as a Physician and Consulting Surgeon, and hopes by his care and attention to merit their patronage and support.—68, Bowater-crescent, Woolwich, July 17, 1861.

"Out of numerous testimonials in possession of Dr. Evans, the following is appended:—Colonel the Honourable Sir C. B. Phipps, K.C.B.—Buckingham Palace, March 9, 1858.—'My dear Evans,—I can have no hesitation in testifying to the high regard that my brother Lord Normanby, Lady Normanby and myself entertained for you during the time that you were good enough to remain in my brother's family as Medical attendant, during his government of Jamaica. My brother's selection of you for this responsible post was entirely dictated by his observation of the mode in which you performed your duties in the *Conway*, and the opinion entertained by your Captain, now Admiral Eden. The opinion so formed was only strengthened by experience, and I know that my brother had the highest opinion of your skill, unremitting attention, and gentlemanlike, and amiable character. Having, as well as Lord Normanby, been under your care, during a somewhat protracted illness, I can speak strongly and most gratefully as to your possessing all these qualities.—Sincerely yours, (Signed) 'C. B. Phipps.'"

Turning in Natural Labour.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Permit me to suggest to Dr. Lee the propriety of expending the sum of £4 in return for one season's instruction in the mechanism of equine parturition, from the chair of a Veterinary Professor. The nose and mouth constitute the natural presentation—not the feet—and the force of my argument was, that as the general contour of the foal in utero was cuneiform, having the nose for its apex and the hips for its base, it presented a remarkable similarity to the cuneiform character of a footling presentation in the human female, and on this fact I drew a rational inference, that as the instantaneous expulsion of the foal was the ordinary process in the delicate organisation of the mare, the same mode might be artificially adopted consistently with the safety of mother and child.

I am, &c.

Bolness, July 11. E. G. FIGG.

Chloroform in Delirium Tremens.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Perhaps you would let me say that a friend at Guy's Hospital has this week directed my attention to a published account of the curious case of bad delirium tremens cured by opium and chloroform, to which I slightly referred in my note of the 20th inst.; it occurs in the *Medical Times and Gazette* at page 303 of your last volume.

We find the patient was admitted with fractured tibia on January 16. The leg swollen, tense, and painful, and steadied by the classic appliances at Guy's Hospital—sand bags: he was treated otherwise as a delirium tremens patient by Mr. Cock, with full diet, porter, and large doses of opium to procure sleep. Next day we read of 5 drachms of tincture of opium in 5 hours and 12 ounces of brandy, and not till after this had ho become quieter and obtained sleep! But mark what follows. On the 18th he suddenly got out of bed, standing on the fractured leg: he was with difficulty persuaded to get into bed again. He was strapped down, and even then his struggles were so great (in fact, as I learned at the time, the bones were going through the skin), it was necessary to administer chloroform, which was continued for nine hours as he became violent whenever its influence subsided. During this period 6½ drachms of tincture of opium and half an ounce of antimonial wine were given in divided doses, together with brandy and porter. At seven in the evening he became quieter, partook freely of food, and again fell asleep. On the 21st nearly all this had to be gone over again, but with the same good effect. February 3.—He had chloroform a third time, "in order that the fractured ends of bone might be placed in apposition." He left the Hospital well. But what would have been the result if he had had no sleep from the 16th to the 21st?

I am, &c.

Sackville-street, July 24. CHARLES KIDD, M.D.

No Register in County Courts!

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Though much has been done to secure Medical protection and Medical reform, it yet appears that in some points of view the desideratum has not been obtained. In short, when I have explained the cause of my thus addressing you, it will be perceived that the Profession is in a worse predicament than it was before.

Having had occasion to apply to the County Court to secure the payment of some doubtful accounts, I was asked whether I was registered under the Act, to which I replied in the affirmative, and was then asked for a certificate of my Registration, to which I said that I would fetch a paper I received from the Medical Council, namely, the receipt for £2 paid for Registration; but at the same time observed that I understood a copy of the Medical Register would be kept in every Court. However, I could not obtain a Register near at hand, and all that I could produce in my favour was of no avail, so that my time was wasted, and I felt the dissatisfaction of being upon the same footing as the veriest quack. Although thus defeated, I could not help concurring with the decision of the Judge.

Now, Sir, will you allow me to direct your attention, and the attention of my Professional brethren, to the fact that although, for the necessities of County Courts, a Post-office Directory and other books are considered to compose a library absolutely necessary for the prosecution of business, the Medical Register is not yet obliged to be found in the library of such an institution, so that in such a case the annoyance is greater than ever; for neither Diplomas, the Medical Directory, and receipt of Registration together, are of the slightest use, but beyond these a Register must be purchased, and then carried with you to the Court before you can be identified. I am, &c.

GEORGE DOWN, M.D., M.R.C.S., and L.S.A.

4, Foxley-place, Kennington, July 26.

Suggestions Respecting a New Medical Act.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—On carefully reading the report of the transactions of the General Council of Medical Education and Registration, I find that it appears to have come to no decided opinion about the principles upon which a new Medical Act should be based.

From observations amongst numerous botanic and other quacks, I am fully persuaded that to make any Act effectual for the suppression of such practitioners as those who, under the name of "herbalists," "Medical botanists," etc., practise Medicine, it is absolutely requisite to define what constitutes Medical practice, etc., in the clearest and most unmistakeable terms, thus, for example. "Practice of Medicine" shall be defined to be, the act of prescribing as a Medical practitioner, or undertaking to treat, by any vegetable, or other reputed medicinal substance or substances, or otherwise to conduct medically, any case of organic disease, or functional disturbance of the human body; or to attend cases of parturition as a practitioner in Midwifery. Likewise "Practice of Surgery" shall be defined to be, the act of prescribing for, or undertaking to treat, or remove by instruments or otherwise, any morbid or abnormal growth, or diseased structure; the reduction of dislocations; the treatment of fractures, abscesses, ulcers, wounds, and all other injuries of the human body, and congenital deformities.

It is very desirable that the Act should define what shall be the legal limits of the practice of Pharmaceutical Chemists and Druggists, etc, which might be effected in the manner following:—

"Nothing in this Act shall be construed to affect or in any way injure Pharmaceutical Chemists and Druggists, etc., so far as the selling or compounding of drugs as such, or Pharmacopœial compounds, and medicines according to the prescriptions of Registered Practitioners, or any other preparation or nostrum not amounting to actual Medical or Surgical practice as defined by this Act."

Then the clause as previously recommended to the Council will prove most effectual, viz.:—

"From and after the passing of this Act, no person shall practise Medicine or Surgery for gain or profit, except such persons as are duly educated according to the requirements of the General Council of Medical Education and Registration, or are for the time being registered according to the provisions and requirements of the Medical Act, 1858."

Trusting that we shall ere long have a comprehensive and efficient Act in force, I am, &c.

J. A. BOWEN.

COMMUNICATIONS have been received from:—

DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT; Professor SIMPSON; M. CLAUDE BERNARD; Dr. ROBERT LEE; Dr. PEACOCK; Mr. SOELBERG WELLS; Dr. ANDERSON; Dr. MAPLETON; Dr. LANKESTER; Dr. LETHEBY; Mr. PROPERT; Dr. FIGG; Dr. MUSHET; Dr. KIDD; Mr. HODDER; Mr. RIVERS; Mr. WOODHOUSE; REGISTRAR-GENERAL; Mr. CHAPMAN; Mr. GASCOYEN; Mr. BUTLER; Mr. GIBSON; and our Correspondents at New York, Constantinople, Naples, Berlin, and Wiesbaden.

APPOINTMENTS FOR THE WEEK.

August 3. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

5. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

6. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

7. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

8. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

9. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

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ST. THOMAS'S HOSPITAL IN 1861.

By F. LE GROS CLARK, F.R.C.S.

Surgeon to the Hospital.

Lecture X.

Gentlemen,—Since my last Lecture a case of extensive tumour of the pelvis has terminated fatally; and I think it presents sufficient points of interest to deserve your notice, although it affords but little scope for practical remarks.

E. G., aged 30, a married woman of unhealthy aspect, was admitted on January 7, 1861. She had been the subject of a tumour above the left hip-joint for three years, and had very little account to give of it, beyond its gradual growth, her increasing incapacity to walk, and the loss of health which accompanied its development. When admitted she suffered much pain and presented an anæmatous appearance, but without marked emaciation. She got but little rest at night, and lacked appetite. The tumour, which was evidently of bony origin, was limited to the left side, and could be traced from the exterior of the pelvis, over the crest of the ilium, to its interior, where it had evidently encroached on the contained viscera.

Of the character of this morbid growth I was doubtful, and conjectured that it would probably prove to be medullary cancer of the bone. Several circumstances concurred to induce me to hazard this diagnosis on the patient's card with a query attached to it.

Nothing could be done beyond treating the more urgent symptoms by palliatives; for it was apparent that, whatever the nature of the disease, it would terminate fatally. She accordingly had such support as she could take, with tonics and anodynes. She survived until the 2nd of June, when she sank at last rather rapidly. The following are the appearances presented at the post-mortem examination, as reported by Dr. Montgomery:—

The substance of the lungs was pale and very dry. The pericardium had rather recent coagulated lymph on both its surfaces, which were glued together. The heart itself healthy; the liver small, pale, and dry; the spleen soft and pulpy. The stomach and intestines healthy. The pelvis of each kidney was considerably dilated, but the substance of the organs appeared healthy. The bladder was compressed by the tumour which encroached considerably on the pelvic cavity; and so were the rectum and vagina; but these with the uterus were healthy. The other textures of the left side of the pelvis were displaced, but were not involved in the disease. The tumour was entirely confined to the bone, and involved nearly the whole of the os innominatum. The crest of the ilium and some portions of the ischium were the only parts which retained their original structure. The growth was projecting on all sides, and formed a solid tumour of eight and a-half inches in diameter, vertically, and nine inches horizontally. In making a section it was found to be enchondroma. The microscopical appearances were those of cartilage. The head of the femur was healthy, although the surface of the acetabulum was altered.

In examining this tumour for yourselves, you will perceive to what an extent the pelvic viscera have been encroached upon, a circumstance which probably accounts for the dilated condition of the pelvis of each kidney. The only other remarkable disease appeared to be recent, and probably hastened death; I mean the pericardial inflammation, yet this did not attract attention during life.

Thus, the diagnosis which I hazarded as to the nature of the tumour proved incorrect, though, as I have remarked, the issue of the case was not thereby influenced. You will not often have the opportunity of seeing enchondroma attain so large a development, and, therefore, I have thought it worth while to bring the preparation under your notice.

Caries of the Head of the Humerus.—A case of some interest has lately been subjected to operation in my ward, the particulars of which I will now give you:—J. H., aged 39, of spare habit, and with an exhausted appearance, was admitted on May 22. He stated that he had been the subject of carbuncle on the shoulder, and that he has had a discharge from this part ever since; that he suffered much pain, especially on attempted movement of the arm, and that his health had given way. On examination I found an open sinus about an inch below the acromion process, leading down through the deltoid to the neck or tubercles of the humerus, close to the head. The upper part of the bone was evidently expanded, and the probe passed into what felt like carious, cancellous texture. The motion at the joint was very limited, and attended with suffering. The patient appeared much exhausted.

This examination enabled me to interpret correctly the improbable history which the patient gave of his own case; and on June 8, I undertook an operation for his relief. It was essentially an exploratory operation, which, I anticipated, might not improbably terminate in excision of the head of the humerus. I made a free incision down through the deltoid muscle in a semicircular direction, guided by a director which was passed into the diseased cavity in the bone. The surrounding bone was cut away with a gouge, and I sought for a sequestrum, but could find none; neither could I discover any communication with the interior of the joint, though the part operated on corresponded to the tubercles. On consideration, I therefore determined to proceed no further, but to treat the wound as a deep sinus, by keeping it plugged with lint. This was accordingly done, and the wound was lightly dressed. The patient soon rallied from the effects of the operation, and in the course of a few weeks recovered health and strength, and freedom from pain, which he had not enjoyed from the time that he was first attacked. The motion of the joint was also considerably augmented; and he left the Hospital at his own request, before the wound was quite healed.

There are many points of interest in this case. The onset of this disease was insidious and deceptive, as I have before pointed out to you, it frequently is. What the patient took for a carbuncle was, I apprehend, the suppuration attending inflammation of the bone. That the joint was secondarily affected seems most probable, from the curtailment of its mobility without communication with the actual seat of mischief,—inflammation from contiguity.

You will understand that I did not propose to myself the gouging of the carious bone as the end of the operation, but as a means to an end. Having determined to proceed no further, I was satisfied to treat this case in accordance with the principle I have mentioned before, viz. that of keeping a free external opening, as in the treatment of deep sinuses in soft parts.

Flat-foot.—Two cases of this deformity are now in the Hospital, and I take the opportunity thus afforded me of directing your attention to the cause of this condition and its treatment. Each of the two lads has been under my care on a previous occasion, and has derived so much relief from an operation on the worse of the two feet, that he sought for similar relief to the other.

In this condition the foot is everted, the inner malleolus prominent, and the arch of the foot lost, so that the superincumbent weight, instead of resting upon the natural tripod, is received upon the whole plantar surface of the foot. The consequence is great weakness and awkwardness in walking, as well as actual pain, from the pressure upon parts which ought naturally to be protected from contact with the ground. The *cause* of this state appears to be twofold, positive and negative; abnormal shortening or spasm of certain muscles, and elongation and attenuation of the internal lateral ligament of the ankle-joint; this latter being, probably, in most instances, the consequence of the ill-balanced muscular action. The muscles which I have usually found at fault are the peronei and long extensor of the toes, and to these, therefore, I have usually directed my attention.

G. H., aged 14, re-admitted on May 1 with flat-foot. His right foot had been operated on a twelvemonth since, and he has since worn a boot with a lateral steel support. On this first occasion the extensor muscle of the toes was divided, just before its distribution, and the foot was subsequently kept inverted by a suitable apparatus, until a boot could be substituted. In the left foot the peronei muscles were the

active source of the distortion, and were accordingly divided behind the outer malleolus, with immediate and manifest relief to the distortion. The boy is nearly well, and is now about to be presented with a boot and steel support, which he will wear until the internal lateral ligament of the joint recover its tone and normal development.

J. W., aged 14, was admitted first in February, when the peronei tendons of the left foot were divided. He had obtained so much relief from this operation and the subsequent treatment, that he begged that the other foot might be similarly dealt with. In each instance the plantar arch was quite obliterated, the internal ligament of the ankle much elongated, and walking very painful: he was, in fact, incapacitated from following his employment. The peronei tendons were divided also in the right foot very recently, and the case remains under treatment.

In reviewing the action of the various muscles around the foot, it is obvious that their attachment is designed to preserve the plantar arch, and that such healthy condition must depend, in great measure, on the evenly-balanced action of these muscles upon their several attachments. Thus, the peronei and tibial muscles antagonise each other, and the expanded insertions of two of them into the tarsal bones is very instrumental in preserving the transverse as well as the antero-posterior arch. Again, the long extensor of the toes, from the outward obliquity of its course, tends to evert the foot in common with the peronei, and thus to antagonise the inverting action of both tibial muscles. Not infrequently, indeed, the gastrocnemius is implicated in these distortions; but when such is the case, the foot is thrown more or less forwards on the toes, by the raising of the heel. Of this class of cases I am not now speaking. Then the effect, usually,—perhaps sometimes the cause,—is, that the inner ankle projects, from elongation of the inner lateral ligament, and consequent loss of support to the inner side of the joint. It is evident that, under these circumstances, it would be useless to attempt to remedy this defect as long as the active cause is in operation; and therefore it is expedient to divide the more tense of the two sets of tendons mentioned; and if this be insufficient, the other, or others, may be at once severed; and then the foot will usually be found completely at the control of the operator.

Compound Fracture of the Leg.—You have recently witnessed an instructive and interesting case of fracture, of which the following is the history:—T. V., aged 60, a labourer, who stated that he had led a sober life, was admitted on July 2. He was healthy in appearance, and had always enjoyed good health. He had just fallen from a height of twelve feet into a barge, the consequence of which was a compound and comminuted fracture of the tibia, which protruded through the skin, and a comminuted fracture of the fibula. The almost entire absence of pulsation in the arteries below the seat of injury induced the supposition, at first, that they had been torn through; but, on more careful examination, this condition was found to be due to the diseased and altered condition of the vessels, which felt almost like cylinders of bone. The condition of the patient, and the circumstance just alluded to, led me to conclude that the best and only chance of saving the patient's life was to amputate his leg, which was accordingly done at once. The fibula was found to be fractured high up as well as low down. The patient bore the operation well, and lost but little blood. In tying the rigid, indeed the calcified, artery in the ham, just after its bifurcation, a circumstance occurred which I do not remember to have witnessed before: so firm and resisting was the vessel, that after a stout ligature was tightly applied round it, it continued to bleed, and required a second ligature higher up. An examination of the limb showed that the arteries were almost entirely calcareous throughout their whole extent; and I was thus led to predict that there would either be secondary hæmorrhage, or inaction, followed by gangrene of the stump, from plugging of the arteries, and consequent inanition. Three days have now elapsed since I operated, and though my fears respecting hæmorrhage have not been realised, I have every reason to apprehend gangrene, from the entire absence of any action in the stump. The flaps are soft and flabby, and there is no effort at discharge of any kind. Yet the patient is calm, with a good pulse, and a nervous system which seems at present to resent but little the severe double injury inflicted.

Why, with such a prospect, it may be asked, did I operate? Simply because I considered the case entirely hopeless without the operation. I have seen very severe fractures recovered from in young and healthy patients; but reparation with such a condition of arteries, at the age of 60, was hopeless.

(Since the lecture was delivered, this patient has died. He survived three days after the last report; *i. e.* six days from the date of injury. The stump was simply beginning to decompose, and was sloughy at one or two points. He became delirious and very violent, and then sank exhausted. A post-mortem examination was not permitted, and therefore we can only conclude that, in all probability, the artery was plugged with coagulum for a considerable distance.)

I have recently admitted a case of hopeless disease of the knee-joint, on which I propose performing excision as soon as the patient's enfeebled health will permit it. I acknowledge that I shall approach this operation with much misgiving, for the patient is much exhausted by suffering and by the profuseness of the discharge from the knee; but I think he would as ill bear the shock of amputation; the alternative of attempting to save the limb is, therefore, preferable. But I will report the issue of this case at a future lecture.

ORIGINAL COMMUNICATIONS.

ON

PARASITIC AFFECTIONS OF THE SKIN.

By T. McCALL ANDERSON, M.D.

Fellow of the Faculty of Physicians and Surgeons of Glasgow, &c.

No. XI. (*Concluded.*)

In my last communication I endeavoured to sketch out the most prominent symptoms of Scabies, laying greater stress upon those which are the most useful in arriving at a correct diagnosis, and pointing out that the acarus by no means produces of necessity a vesicular eruption.

The *Prognosis* is never serious, as the disease occurs in this country, but, when neglected, it may occasion great torment from the itching, entirely depriving the patient of sleep, and the scratching gives rise to very extensive, varied and loathsome eruptions. But the treatment is so simple that the disease may now be cured in an incredibly short space of time, although the secondary eruptions may be long of disappearing. I mentioned already that a constitutional eruption, such as eczema, may be called forth by the irritation, in persons so predisposed, and the prognosis of these is, of course, more serious, as regards a cure, although not generally dangerous to life. I have already stated the proportion of deaths in the recorded cases of Norwegian scabies, the prognosis of which is always more serious.

Treatment.—As a general rule, nothing can be easier than the cure of scabies. The principle to be kept in view is, to make such applications to the skin as will not irritate it too much, but which will reach the parasite and kill it; after which, the exciting cause of the disease being removed, the secondary eruptions generally disappear without treatment. In some cases, however, when these are very severe, as, for instance, when large ecthymatous pustules have been developed in abundance, it may be necessary to allay them before applying a parasiticide which is necessarily more or less irritant in its nature. This is done by antiphlogistics, warm and emollient baths (prepared by putting a couple of handfuls of potato-starch into a warm bath), and cataplasms locally, while opium (internally) is sometimes necessary to allay the itching for a time and the desire to scratch the skin consequent upon it. The preparation to be used, and the manner of its employment must vary according to the degree of delicacy of the skin of the patient, for in the case of those whose cutaneous envelope is fine and sensitive, it is much better to take a little longer time to destroy the acari, than, by irritating the skin too much, to risk the production of manifold, annoying, and often obstinate eruptions.

In healthy adults, such as one frequently meets with amongst the working classes, whose skins are coarse and not over-sensitive, who are not subject to cutaneous eruptions, such as eczema, and in whose cases the secondary eruptions produced by the scratching are not very severe, the treat-

ment recommended by Hardy, the most rapid and the most effectual in killing the acari, may be put into practice. The *whole* body of the patient is first of all thoroughly scrubbed with good black soap, and this process should be continued for half-an-hour. He is then put into a warm bath and kept there for half-an-hour also, after which the *whole* body is rubbed over with the following modification of the pommade of Helmerich:—℞ Subcarbonatis potassæ ʒj., sulphuris ʒij., axungiæ ʒxij. The next morning the patient takes a warm bath to remove the pommade, and the cure is complete as regards the destruction of the acari, while the secondary eruptions soon disappear. The genuine pommade of Helmerich is one-third stronger, but it is rather too irritant. The potash in the black soap and in the pommade, acts as a dissolvent to the epidermis, thus allowing the sulphur to come into more immediate contact with the acarus, while, at the same time, it is an irritant to the insect. The warm bath is of service in washing off the black soap and dirt, and in causing the removal of the softened epidermis. Patients in private practice will often be intolerant of this kind of treatment, and it is besides quite inapplicable to children and females, and to men who have delicate skins, as well as to those who are subject to constitutional affections of the skin. In these cases we must use milder means, although the destruction of the parasite is a slower process. It is better, however, to proceed slowly and surely, than, by means of powerfully irritant treatment, to kill the acari at once, and, at the same time, to produce eruptions which may last for months. Under these circumstances the patient should clean himself thoroughly in a warm bath with ordinary (being much less irritating than black) soap, and then the lotion recommended by Vleminekz, of Belgium, with which the Belgian army is treated, should be applied. It is the following:—℞ Calcis ʒss., sulphuris ʒj., aquæ ʒviii. Boil and stir constantly till a homogeneous mixture is produced, then pass it through a sieve. This quantity is more than sufficient for one person. Some of it should be rubbed into the skin, but not too roughly, and it is much less irritant than Helmerich's ointment. The application is to be repeated every night for several evenings, and the parasite dies without secondary eruptions being produced.

Hebra's modification of Wilkinson's ointment is a very good one, especially so when the person affected is predisposed to eczematous eruption, or where the scratching has already brought them out. It is the following:—℞ Sulphuris, olei fagi, āā ʒvj., saponis viridis, axungiæ āā ℔j., cretæ ʒiv. M.

In this preparation the potash in the black soap acts, as before stated, as a dissolvent to the epidermis and the chalk in removing it mechanically, the tar counteracts the tendency to, or cures the existing eczema, and the sulphur destroys the acari. This ointment should be well rubbed in, after the skin has been prepared for it by cleaning the body with common soap in a warm bath. The patient may either wash off this ointment soon afterwards, or may leave it on over night and wash it off in the morning, in which latter case the cure is more rapid. In either case, however, more than one repetition of the above process is generally necessary to effect a cure.

When females or others with delicate skins are affected, and when the smell of sulphur is objected to, sulphur soap may be used, which is nicely scented, and the disagreeable odour concealed. The body should be scrubbed every night with it, in a warm bath. This is the mildest of all the methods of treatment, and requires to be frequently repeated to effect a cure.

Or, instead of the above, the ordinary sulphur ointment may be used, adding to it an aromatic oil, as oil of lavender, oil of carraway, or oil of cinnamon, in the proportion of a scruple to an ounce of the ointment. It will be seen that all these applications contain sulphur as the active agent in the destruction of the parasite. Other substances also destroy it; but sulphur has been almost unanimously decided to be the most effectual.

I do not think it necessary to discuss the experiments which have been made on the length of time various preparations take to kill the acarus, after the removal of that insect from the body, because it is found to be one thing to kill the insect when it is brought into immediate contact with the medicine, and another to destroy it when it lies embedded in the epidermis.

But whatever preparation is used, it is necessary that it be rubbed into the skin of the *whole body*, with the exception of the head, which is not usually attacked; for if one impregnated acarus is left unscathed, the disease will soon be as bad as ever.

It is needless to refer to any more of the very numerous methods of treating scabies, for, with the above selection, any case of scabies may be successfully treated.

Finally, it is necessary to destroy the insects and eggs, attached to the clothes of the affected person. For this purpose they should be exposed to hot air (at the temperature of 150° F.) for some time; or, if washing clothes, they should be put into water which is nearly boiling, in which the acari cannot live. For this purpose, also, they may be exposed to the action of sulphur vapour; but this is apt to discolour the clothes, and to give them a disagreeable odour.

Fig. 20.

Acarus Folliculorum.

In the treatment of Scabies Norvegica, the crusts may be removed by repeated baths, opiates being given in the intervals to allay the itching. A parasiticide, containing sulphur as the active agent, and tar to counteract the eczematous eruptions, should then be used. It is not necessary, however, to enter into minutiæ with regard to this variety, for it is merely an exaggerated form of scabies, and one which is decidedly rare; while each case must be, more or less, treated on its own merits.

The only other animal parasite which takes up its abode upon the skin, is the Acarus Folliculorum, the insect met with in the glands amidst the sebaceous matter. (See Fig. 20.) I do not intend to refer at any length to this insect, because it does not give rise to any morbid condition of the glands. That it *may* be met with in the follicles of those who are affected with acne, is doubtless the case; but it is equally certain that it plays no part in the production of that disease. I have examined the sebaceous matter (from the glands of the nose usually) of many persons taken at random, and have detected the parasite about once in every five examinations. Of course, in many of those whom I examined, the acarus was probably to be met with, had I searched for it, among the sebum taken from a larger number of glands; but, as far as my own observation goes, I am not prepared to agree with those who assert that it is to be met with in the sebaceous follicles of all persons.

ON EXCISION OF JOINTS.

By R. GARNER, F.L.S.
Senior Surgeon to the North Staffordshire Infirmary.

Any information embodying the results of excisions of the large joints is particularly interesting at the present time, especially as regards those of the lower extremity. The merit of the operation on the knee, at least as to its general application, has yet to be decided: it is especially desirable to know in what state the limb is generally found at an advanced period after the operation. With respect to the life of the patient, it has been well ascertained that the operation is tolerably safe; our excisions of the knee at the North Staffordshire Infirmary, five in number, have, apparently, in no instance placed life in danger.

Two adults continue regular patients: the first a girl of 19, just made out-patient, operated upon on November 24, 1860, the other a middle-aged man, still an in-patient, in whom the knee was excised on April 6, 1861. Both these cases are considered to be doing very well, both as to the state of the limb and the general health. The young woman still uses crutches, and has some unhealed places on the knee; the man's case is particularly promising, with only one open point. A scrofulous boy having, in addition to the knee, a stiff but quiet elbow, was also operated upon on December 1,

1860, and appears to be going on well, being occasionally brought to the Infirmary in a perambulator ; the knee firm and straight, but with two open points (a).

But with respect to the more important question, the result at a later period of the treatment, the following cases are more interesting :—A girl of about 7 had her knee excised January 3, 1860, by a U-shaped incision, the patella being left. It may be said that the wound healed by the first intention, and she was discharged well in three months ; but upon inquiry (May, 1861) the limb now appears to be a good deal atrophied, the child going about on crutches, and an abscess threatening below the knee. The last case is a young woman of about 20, excision March, 1860. In April, 1861, the patient used crutches, but could walk a little without them ; the leg looked well, but there still existed two unhealed spots in the knee. June 3.—She can now walk two miles without any support from crutches.

One might at first suppose a person with an excised knee to be in much the same position as a patient with a compound fracture, in which it has been necessary to operate on the ends of the bones ; but the probability of recovery with a strong limb is evidently less in the excision, as there is risk of diseased parts being left, with a bad constitution to boot, besides the muscular system being left in an abnormal state in the limb. The treatment of such cases is very prolonged and expensive, large quantities of wine being commonly consumed, and sometimes removal to the sea-coast being required ; but this is of secondary importance to the consideration of the future state of the limb. Without pre-judging the case, it may be observed that a weak leg (not reckoning upon its liability to fresh disease) may, in point of utility, be no better than a wooden one ; for the labourer the latter would probably be preferable, whilst the former might be more desired for the counting-house, studio, or drawing-room. The now-ascertained fact that in young subjects the limb often ceases to grow, is a strong argument against the operation in them.

The hip-joint was dexterously excised in one case by Mr. Folker, who also was the operator in two of the above knee cases. It was necessary to gouge the acetabulum, and indeed it was found that the disease could not be totally eradicated. The man sunk of exhaustion ten weeks after the operation, expressing, however, that his sufferings had been alleviated by it.

A friend of the compiler of this paper, Mr. Davis, in his presence, very cleverly excised the whole of the ankle in a youth, a private patient, in January, 1858. In May, 1861, the joint had perfectly healed and was sound, but, as is the case in other instances on record, its looseness prevents it being competent to support the body in a very satisfactory manner. In fact, the whole limb is extremely atrophied.

In four adults brought into the Infirmary, with compound dislocation or fracture, it has been necessary, or at least thought best, to excise the astragalus. Two of these patients did well, and have now useful limbs ; two, however, died of bad diffused inflammation and its disastrous sequelæ.

Our cases of excision of the elbow for disease have been only five, with two partial ones in cases of accident, which did well. Of the five, three were perfectly successful. One, a middle-aged woman, wished for amputation some months after the operation, which was, consequently, done, with recovery. The fifth was the case of a scrofulous and consumptive girl, in whom a portion of the opposite hand had been previously removed ; the patient died, I believe, some weeks after the resection, the joint showing no disposition to heal or consolidate. One difficulty in this case was to keep the ends of the bones from riding over each other. It might be well to try the effect of sawing the bones obliquely to prevent the last occurrence, and this might obviate a tendency of the arm to become extended when getting well, which is sometimes a troublesome circumstance. A friend who has experience in cases of excision has, in the knee, sawn across the bones, so that, when they were brought into apposition, the leg was a little bent, and in consequence, when cured, practically longer, from the patient walking on the front of the foot ; and this he did well.

Mr. Bent, of Newcastle-under-Lyme, afterwards Surgeon to our Infirmary, excised the head of the humerus in 1771, the case being the third excision of any large joint in England. The scapula appears to be often implicated in diseases of the shoulder-joint ; at least, so we have found it post-mortem ; such cases frequently get well without operation.

Certain operations on the long bones may justly be called excisions or resections. In one case the whole of the ulna, except the upper quarter and a bit of the lower extremity, was removed in a young girl. There was no surrounding bony deposit in this case, and the ulna, when loosened at its extremities, slipped out, as it were, into the operator's hand, the arm recovering, with its use unimpaired, in all respects. In other cases, portions of diseased fibula have been removed with the best effect, or even of the tibia. In a case of the latter kind, where a good piece of the bone was taken away, the fibula prevented the approach of the extremities of the tibia, and the intervening chasm was not filled up, from the deficiency of bony deposit ; in this apparently hopeless state the patient, in desperation, took to walking, and the result was, that the ends of the tibia were brought nearer together, and firm union took place. The leg was, of course, a little bowed, which, however, was of trifling consequence, the patient being a female, and her dress concealing the want of symmetry.

(a) August 6, 1861.—The progress of the first patient, the young girl, has not been very favourable, it having been necessary to straighten the limb under chloroform. The leg had been retracted backwards, apparently a not uncommon circumstance. It might, perhaps, be well to divide the tendons of the flexor muscle in such cases. The man is still doing well, though it has been necessary to gouge away a prominence of diseased bone. The boy walks without crutch or stick.

COMA FROM AN UNCERTAIN CAUSE.

By T. J. WOODHOUSE, F.R.C.S.

Caroline J., aged 18, living in Bethnal-green, was visited at home on behalf of the Queen Adelaide Dispensary on February 2, 1860. She was found to be lying in bed, perfectly insensible, and not to be roused by any means. The skin was cool, the pupils widely dilated and insensible to light, There was no paralysis of the face or limbs. The feet were cold, and moved when irritated. The mother's account is, that her daughter was first taken ill on January 21, when she had an attack resembling scarlatina, being attended with sore-throat and a red rash. She went on pretty well until the day before yesterday (January 31), when she sat up late at night and ate heartily of plaice. In the morning she was found in a half conscious condition, answering questions put to her in an imperfect manner, and vomiting repeatedly. She yawned a great deal, but did not talk, and gradually this state of insensibility deepened until she was quite comatose, as when visited. The bowels have not been open for two days, nor has she passed urine for the same length of time. (The latter statement, however, the mother is not quite sure about.) The hypogastric region did not appear distended. I had no catheter at hand, and could not at that time examine the state of her water. There was no thoracic disease, as shown by auscultation and the stethoscope. There was no œdema, nor had there been at any time. There was no history of renal disease, as far as could be ascertained by strict inquiry. A child of the same family had died of hydrocephalus—as was shown by a post-mortem—some years ago. Menstruation regular. The girl herself never had fits.

February 2.—Emp. lyttæ nuchæ ; ℞ Ol. crotonis, gt. j., 3tis hôris, in formâ pilulæ.

3rd.—Same. The pills were returned as soon as swallowed. The blister shifted, and did not draw well. Shave head and apply blistering fluid. Enema purgans. ℞ Calomel gr. ij., 2dus hôris.

4th.—Better. Follows with her eyes the movements of persons in the room. The pupils are still dilated, but not so widely : they are still insensible to light. The enema brought away a small quantity of lumpy fæces. The urine has passed freely, but unconsciously. The blistering fluid did not draw well. The head and shoulders are kept raised. Repeat enema and blister.

5th.—Slight improvement. The enema brought away a large quantity of clay-coloured stools. When raised up she made an effort to protrude her tongue, and the pupils are more active. The blister drew very imperfectly. In spite of all their efforts to keep her clean, two large bed-sores are threatening on the nates. Repeat enema and powders.

6th.—Better. Protruded her tongue partially. It is

furred and moist. Knows people about her. Has tried to speak, but cannot articulate anything. Pupils act, but sluggishly. Bowels relieved several times, motions fluid and dark. Gums red, breath fetid. Omit enema and calomel. ℞ Mist. salinæ eum magn. sulph. ʒj. t. d.

7th.—Extensive excoriation on nates. Answers questions by nodding, and points to her head as the seat of pain. Protrudes her tongue more freely; but the pupils are less active. Bowels continue open. Pulse 80.

8th.—Much better. Understands all that is said to her. Bowels act well. Motions still very unnatural. Tongue tolerably clean.

From this time until February 27, when she was discharged, eured, the improvement was gradual, but decided. For two days after the last notes were taken she rambled in her head at times, but was easily roused. Her motions were once or twice after passed unconsciously. After February 10 she was perfectly conscious. I examined the urine, and could discover no albumen.

I have sent this case because it was interesting to me from the extreme obscurity of the cause of the coma. The history of scarlatina would naturally suggest some renal mischief, but I can scarcely think it probable that kidney disease would go on to the production of coma without giving rise to some symptoms previously, and the urine free from albumen. The fact that one of the family died of hydrocephalus, with the symptoms observed in my patient—the coma, vomiting, and constipated bowels—would seem to point to the head as the seat of mischief, and this is, perhaps, the most tenable explanation. But the girl was eighteen years of age, well nourished, and had no signs of tubercular deposit elsewhere.

I thought at one time she might have poisoned herself with the plaice she had eaten, but she had often taken it before, she stated, and it had never disagreed with her. She was quite sure it was fresh.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
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SYPHILITIC AFFECTIONS OF THE NERVOUS SYSTEM.

CASES OF PARALYSIS ASSOCIATED WITH SYPHILIS.

(Continued from page 85.)

In the *Dublin Hospital Gazette* for February 1, 1860, is a translation, by Dr. W. D. Moore, of a Clinical Lecture on Syphilitie Paralysis, by Professor Hassing. Two cases are related. In both of them paralysis of the portio dura was one of the chief symptoms, and was in both, no doubt, due to disease in the course of the nerve through the petrous bone, as we know that paralysis of the whole of the parts supplied by this nerve rarely arises from true disease of the brain. Nor is it likely that in either of them it was intracranial disease affecting the nerve in its course within the cranium, as in that ease the portio mollis must almost neeessarily have been affected as well, and then (of which there is no note) there would have been deafness. There may have been some syphilitic deposit in the nerve, or perhaps some thickening of the walls of the aqueductus Fallopii, or, as happens occasionally, extension of disease from some inflammatory attack of the mucous membrane of the tympanum; but in this case, also, there would have been impairment of hearing. Mr. Toynbee says that "it not unfrequently happens that the inner osseous wall of this eanal (the aqueduct) is incomplete, and thus the mucous membrane of the tympanum is in contact with the outer surface of the nerve." In the first case, a man, aged 29, the symptoms were slight vertigo, some weakness of vision and impairment of memory, with depression of spirits; pain across the forehead; weakness in left arm; pricking sensation of left half of the face, and impaired speech. The left eyelid could not be completely closed, and the mouth was drawn rather to the right. The other ease was that of a woman, aged 48. In this case the symptoms were pain in the left side of the head, and paralysis of the portio dura. The first patient was quickly cured by the iodide of potassium. The second patient was treated by bichloride of mercury. Considerable improvement followed; but it is not stated that she recovered.

Case 5.—Paralysis of the Seventh and Fifth Nerves—Recovery Under Use of Antisyphilitic Remedies.—Launcelot R., aged 43, admitted, under the care of Dr. Brown-Séquard, for paralysis of sensation and motion in the left side of the face, which had come on reeently. The left eye also is turned out, but this appears due to old disease. He had brain fever when ten years old, after which he squinted, the eye being turned in. He was operated on at the age of 19. The operation, performed in the old way (not subconjunetival), was followed, as it so very often was, by eversion, and thus it remains. Ten years ago he had rheumatic fever, and then lost the sight of the left eye. About that time he also had syphilis, but there is no history of any subsequent recognised symptoms, except those which we are about to relate. When admitted he had partial paralysis of the portio dura on the left side, the mouth being drawn to the opposite side, and the eye of the affected side being open, from paralysis of the orbicularis. Being unable to keep the dust out of the eye from want of the action of this muscle, he had it covered up by a piece of rag. His hearing, he said, had been good, and when examined he could hear well on both sides. The whole of the left side of the face, and the whole tract supplied by the sensitive branches of the fifth, was quite numb. He said that in these parts he had no feeling at all. The tongue was turned to the right, but there was, he says, no loss ot sensation, nor any alteration in taste. He thinks he should have noticed if there had been, as he used a tongue-scraper every morning. Dr. Brown-Séquard considered that the ease was one of syphilis, and prescribed accordingly the iodide of mercury in quarter-grain doses, along with three-grain doses of the iodide of potassium. The rapidity with which the man's symptoms abated, confirmed, so far as recovery under antisyphilitic remedies can do, the diagnosis of the case. We may add, that he had well-marked acne rosacea, but this he had had before he had syphilis, and it was not much affected by the treatment adopted.

Case 6.—Syphilitic Node on the Frontal Bone, etc.—Paralysis of the Left Side of the Face and of the Left Third Nerve.—A woman, aged 32, was admitted, under the care of Dr. James Russell, into the Birmingham General Infirmary, suffering from syphilitie cachexia and actual syphilitic symptoms of unmistakeable character, one being a node on the frontal bone. After she had been in a few days the left side of the face became paralysed, and shortly there was also complete paralysis of the whole of the left third nerve. Under the use of blue pill and the iodide of potassium she steadily improved, but, at her own request, she was discharged before the cure was complete. The muscles supplied by the third nerve, except that the pupil remained dilated, had recovered their power, but her general health was not improved. We have been informed that this patient presented herself at the Hospital a few days ago, August 4, 1861; the eye had quite recovered, and there was no node.

Case 7.—Two Cases of Syphilitic Affection of the Fifth Nerve.—Dr. Todd relates a case of complete paralysis of the fifth nerve, due to syphilis. The patient was also subject to epileptic fits, the immediate exciting cause of which was intemperance. After death, the Casserian ganglion and the trunks issuing from it were found atrophied, in consequence of pressure from adherent membranes. Dr. James Russell, who was the reporter of the above case eighteen years ago, when elinical clerk to Dr. Todd, records a similar one in the *British Medical Journal* for March, 1860. In this case the whole of the fifth nerve on the right side was paralysed, loss of sensation in all the parts supplied by it being complete, and the muscles of mastication being not only impaired in motion, but atrophied. The pupil of the right eye was contracted, and vision was less acute on this side. The hearing also of the right ear was much impaired. In this case, although

the history of syphilis was very clear, the patient was not improved by treatment. It was reported subsequently, after Dr. Russell lost sight of him, that he was suffering from general paralysis.

The following case and remarks are copied from Mr. Hutchinson's Case-book :—

Case 8.—*Scar in the Right Cornea with History of Paralysis of the Right Fifth Nerve—Clear Account of Previous Syphilis, and also of an Attack of Violent Pain in the Head which was Cured by Salivation—Partial Anæsthesia of the Right Side of the Face of Two Years' Duration.*—Mrs. A., aged 47, a red-faced woman, probably of somewhat intemperate habits, came under my care at the Ophthalmic Hospital on August 5, 1861. She had come up from Birmingham for advice as to her right eye. In the cornea of the affected eye was a large white scar, to which the iris adhered. The aqueous chamber scarcely existed, and there had evidently been destruction of corneal tissue. The iris, excepting that it was adherent to the scar in such a manner that the pupil was obliterated, appeared healthy. There was no existing inflammation whatever, the changes being those of long past disease. At first sight I suspected that the case was one of injury, but the woman said that this was not so, and stated that she had "lost her eye by its bursting during a nervous attack in that side of the face." The illness referred to had occurred two years ago. She said that for some time the right side of her face was quite numb from her chin to the top of her head, including the side of her nose, and not in the least involving the opposite half. She had at the same time much pain in the forehead and twitchings in the cheek. After a two months' illness, during most of which she was in bed, the affected side of the face gradually began "to feel," but even up to the present time it has not regained perfect sensation. I found, on careful examination, that the left half of the face was still, as compared with the other, decidedly numb, the anæsthesia being most marked in the forehead. There was no want of symmetry in the face, she could frown, etc., on both sides and both masseters became rigid when she clenched her jaws. It did no appear that there was any difference in gustatory power between the two sides of the tongue. The facts just stated seemed to confirm the woman's assertion that the eye had "given way" in connexion with a nervous lesion, and suggested as strongly probable that paralysis of the fifth nerve or at least of all its sensory trunks, had been the lesion in question. As it has of late been doubted (a) whether the sloughing of the cornea, which has long been known to occur frequently in cases of paralysis of this nerve, be due directly to loss of innervation, questions were put as to the state of the eye during the attack. The woman stated that it was for weeks closed, and that at no time did the lids remain open. As far as she could remember, there was very little discharge, and the lids were not much swollen. I could not make out that she had been paralysed in any other part. As regards the primal cause of the lesion, the following facts are important:—The woman admitted that she had suffered very severely from venereal disease nearly fifteen years ago. She was salivated, but did not get rid of her symptoms for some months. After this she remained well for some years, but five years ago she had a prolonged attack of most violent pain in the right side of her head, for which she was blistered, and at length cured by salivation. Among the symptoms which this woman complained of as having followed the anæsthesia of her face, was great thirst. She said that she had never before been particularly thirsty, but that ever since she had been tormented by continual dryness of the mouth, and was obliged to sleep with water at her bedside. No deficiency of moisture was observable in the mouth, and the symptom of dryness appeared to be a purely subjective one. Her speech was rather thick, and she had, she said, often been falsely supposed to be intoxicated, on account of her husky voice.

Case 9.—*Paralysis of the Sixth Nerve—Syphilitic Ulceration of the Pharynx—Great Improvement Under the Use of Iodide of Potassium.*—Sarah C., aged 37, admitted under the care of Mr. Poland, March 9, 1861, for paralysis of the external rectus on the right side. She, of course, saw double, but the sight of one eye was quite as good as that of the other. She ascribed it to a fall on the back of her head at Christmas. She had a good deal of pain for three weeks after, but it was not in the head, but in the back of the neck. The pupils were of the same size, and neither of them contracted. Both upper lids were on the same level; but on one occasion it was supposed that the right was a little lower. The right eye watered occasionally, and she had now and then pain in the side of the nose and in the temple. Her general health, she said, was very good, and her appearance was healthy. She was married, and had had ten children, of whom six were living. Three died "of their teeth" at the ages of 2 years, 13 months, and 11 days, and one was born dead. A blister was ordered to be applied to the temple, and a drachm of the liquor hydrargyri bichloridi was given three times a-day. She attended until June 15, and was still no better, and it was only on that day that she mentioned a symptom which had an important bearing on the case. She then said that she had some difficulty in swallowing. On examination of the throat there was found, tawny, yellowish ulceration, unmistakeably syphilitic in character, at the back of the pharynx. The treatment by large doses of the iodide of potassium was then commenced, and under its use in a few days the ulceration disappeared; but the paralysis, although much less, was still present to some extent. In reference in this case to the cause of the paralysis we do not pretend to say any more than is implied in our title, that it is a case of paralysis, associated with syphilis. It is possible that the woman's view of the case is correct, and that the injury which it followed was the cause of it. We shall in a series of cases of paralysis of the sixth nerve report two cases in which injury to the back of the head was followed immediately by paralysis of these nerves. In most of the cases, however, which will form part of that series there was no history of violence.

Some little time ago, our attention was directed by Mr. Beddard, Clinical Assistant at the Moorfields Ophthalmic Hospital, to a case of paralysis of the sixth nerve, in which rapid recovery followed on treatment by the iodide of potassium; but unfortunately in the record of the case, there is no mention of any investigation as to syphilis. The following are brief particulars of the case :—

Case 10.—*Paralysis of the Right External Rectus—Treatment by Iodide of Potassium—Recovery.*—Edward A., aged 33, was admitted, under the care of Mr. Streatfeild, at the Royal London Ophthalmic Hospital, for paralysis of the external rectus muscle on the right side. He was a healthy-looking man, and had good general health. Six years ago he had something wrong with his eyes, and he then saw double. The affection for which he was now admitted began during the night, or at least he found one morning on rising, that he saw double. The attack was preceded by frontal headache and by "twitching" of the upper lid. When admitted, the pupil of the affected side was seen to be more contracted than the other, and he had convergent squint. He recovered in a few days under the use of the iodide of potassium. It may be supposed that in this case the recovery was spontaneous; but in the many cases of paralysis of this kind, which will be given in a future number, there is, we believe, no instance of equally rapid recovery. In this case, also, it is worthy of note, that there was some affection of the upper lid, and contraction of the pupil, along with the internal squint. The following quotation from Dr. Ogle's valuable paper in the forty-first volume of the Medico-Chirurgical Society's *Transactions*, p. 440, "On the Influence of the Sympathetic on the Eye and its Appendages," will be read with interest in relation to the above symptoms. Dr. Ogle, in reference to the effects of loss of function of the sympathetic (consequent on section by experiment in animals, or extreme pressure by tumour, aneurism, etc., in the neck), upon the eye, writes,—"Just as we get paralysis of the dilator of the pupil, and consequently *contracted* pupil produced by virtue of the branch of the carotid plexus, given off to the ophthalmic ganglion, so have we more or less paralysis of the abducent muscle, by virtue of the twigs furnished to the sixth pair which supplies that muscle allowing thus of convergent *squint;* and more or less paralysis of the elevator of the upper eyelid by virtue of the twigs to the third pair producing *ptosis*, the orbicularis palpebrarum still acting and overcoming that muscle." We regret that the exact condition of the upper lid was not especially noted (there was no ptosis ordinarily so called), and that no investigation was made as to there being any pressure on

(a) See a notice of Snellen's experiments on this point in the New Sydenham Society's Year-book, for 1859, p. 128.

the sympathetic in the neck. We need not add that the above are only some of the symptoms which follow on lesion of the sympathetic trunk in the neck.

Case 11.—*Syphilis—Inversion of the Left Eye, with Impaired Vision—Contraction of the Pupil—Numbness of the Left Cheek—Great Improvement by the Iodide of Potassium.*—Mrs. P., a healthy looking woman, of dark complexion, aged 29, was admitted an out-patient, under the care of Mr. Hutchinson, on January 8, 1861. She had been married ten years, but had only one child, five years ago, which died at the age of four months. Two months after marriage she had the venereal disease from her husband. She was treated by mercury, and at length got well, but had since been liable to ulcerated throat and tongue. She had also suffered much from pain in the head and about the eyes. Her husband, she said, had had nodes, and she had also suffered from painful swellings about the head. When admitted there was convergence of the left eye, and the diameter of the pupil on this side was only two-thirds that of the other. (Both irides were of good lustre, and there were no adhesions.) The convergence varied, and at times was very considerable. She was, she said, obliged to wear a shade over the left eye in the street, "or she would be run over." She stated that at one time, two months before, she could not see at all with the left eye. She lost the sight gradually, during a period of several weeks. She could, when admitted, see indistinctly with the left eye, but not to make out the largest letters. The double vision was marked; the diplopia being homonymous. There was no drawing of the face, but the left cheek was decidedly anæsthetic. Mr. Hutchinson prescribed ten grains of the iodide of potassium three times a-day. Eleven days later the numbness of the cheek had disappeared. there was no squint, and the pupils were equal in size. The sight of the left eye was, however, still impaired. J. H. J.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

CASE OF EPILEPTIC ATTACKS AND OTHER PREVIOUS SYMPTOMS ASSOCIATED WITH SYPHILIS.

(Under the care of Dr. BROWN-SEQUARD.)

Edmund B. S., aged 42. He had some kind of venereal disease twenty-one years ago, but it was not followed either by rash or sore-throat, and he does not appear to have taken mercurials. He has several times since had venereal disease, but never any rash or sore-throat. He was, however, about twenty years ago, salivated for one attack. He has now well marked syphilitic tubercular disease of the tongue, and has been for some years subject to discharge from the ears. When the discharge is on, he is deaf, but he now, being at present free from it, hears well. It appears that in the first attack, the affection of the ears began with ulceration of the pinna, but he says that in subsequent attacks the discharge has come from the canal. The history of his nervous symptoms date fifteen years back. He then was subject to a "numbness coming over his legs," from the knee to the ankle. He says that they would turn quite white, and feel as cold as ice, but very shortly they would get quite hot. These attacks, only lasting for a few minutes, would come on a dozen times in a day. He was treated for this during a period of twelve months at St. Bartholomew's Hospital, he says, with sarsaparilla and iodide of potassium. It is pretty certain that he had iodide of potassium, as he drew attention to the fact that that drug was prescribed on his letter by Dr. Brown-Séquard. He had not at that time any other feeling of ill-health. He has lately, however, been subject to pain at the back of the head, coming forward to the forehead, and accompanied by giddiness. Five years ago, he had what he calls a "fit." He was talking, when he felt "a sickness" come over him, and he fell down insensible, but there is clear evidence by his description, that this insensibility must have been quite momentary. He has never had any attack which he calls a fit since, but is often troubled by a sensation "like a cloud" coming over his head. It only lasts for "a second," but he is obliged to catch hold of something or he would fall. He also says that this feeling used at one time to "come all over him," but now it only affects his head. He is a compositor, and appears intelligent, and there is no evidence that his mental powers have failed lately.

This case is, as we have said in our heading, one in which epileptiform seizure occurs in a patient affected with syphilis. There does not appear to be any evidence that it is due specially to that cause, and Dr. Brown-Séquard did not think it was due to it. He, however, prescribed iodide of potassium, six grains, three times a-day.

The affection of his legs which he describes, is curious. It was probably due to alternate contraction and relaxation of the blood-vessels. The first being attended by diminished heat, and the second by increased heat. In the increased action of the sympathetic, by galvanizing the nerve trunk in the neck, we get decrease of heat, from contraction of the blood-vessels and by diminished action, after section of the nerve we get increase of heat from dilatation of the blood-vessels.

As we have said, there does not appear to be any failure of mental power. We allude especially to this, as it appears to be an exception to a fact which Dr. Brown-Séquard frequently points out, that the slight attacks of epilepsy, the *petit mal*, are to be looked on more seriously as evidence of failure of mental power than the complete attack, the *grand mal*. In connexion with this, we may add that in cases of epilepsy in which, by treatment or spontaneously, the fits of epilepsy have become less frequent, the slighter attacks have occurred oftener, and the patient has not felt so well in his general health.

ST. BARTHOLOMEW'S HOSPITAL.

VENTRAL HERNIA CONSEQUENT ON INJURY TO THE ABDOMEN.

There was lately in St. Bartholomew's Hospital, under the care of Mr. Stanley, a patient who had ventral hernia. It had followed an injury thirty years ago. He was now in the Hospital for some other disease unconnected with this affection. He was forty-six years of age. Thirty years ago he had an injury by the shaft of a cart in the right side. The skin was not broken at the time, but soon after a painful swelling appeared, which was at first treated by the application of leeches. He was then in this Hospital, under the care of Mr. Earle. According to his statement the "leech holes burst," and some strong smelling matter passed. Mr. Earle then laid the part open, after which "matter" passed through the opening. In four months he was discharged well, and has never since suffered any further inconvenience from the part. There was a swelling about the size of the fist two inches below the margin of the ribs, on the right side. It received an impulse on coughing. He had not found it necessary to wear a truss.

The above brief note is interesting in reference to the occasional effects of violent concussions of the abdomen. It would appear probable that as the result of a blow an abscess formed in the abdominal parietes; whether or not the abscess communicated with the intestines is doubtful.

FRACTURE OF THE BASE OF THE SKULL—HISTORY OF THE ACCIDENT CONCEALED.

(Reported by Mr. HERBERT EVANS, House-Surgeon.)

In our large Hospitals head cases are not unfrequently admitted in which great difficulty of diagnosis is encountered as to whether the symptoms are due to injury, to poison, or to apoplexy. It is upon the history given that the diagnosis is usually based, and this is but too often in Hospital practice of a most imperfect character. Not unfrequently those who bring the patient in know nothing more about him than that he has been found insensible in the street. In private practice the chief difficulty lies between apoplexy and poisoning by opium, since the history of an injury is rarely concealed.

About four years ago a Surgeon to one of our largest Hospitals was passing through a Medical ward, when his attention was arrested by the deeply stertorous breathing of one of the patients. On asking what the case was, he was informed that the man had been picked up in the street in a fit, and that he was dying. Being more accustomed to regard stertor from its Surgical than its Medical aspects, he instinctively examined the man's head. His examination resulted in the discovery of a depressed fracture without external laceration.

Trephining was at once resorted to, the stertor ceased on the elevation of the bone, and we believe the man ultimately recovered. Facts of this kind cannot be too widely known, since they show in a striking light the necessity for caution and alertness in dealing with these cases of so-called "falling in a fit."

In the following instance the fact that the patient had been liable to fits, rendered a mistake the more easy :—

A man, aged 49, was brought to the Hospital in a state of complete insensibility, on October 19, at eight a.m. The statement given was, that he had been suffering from delirium tremens for six weeks previously, and that he had had "fits" on former occasions. He was quite insensible, and his breathing stertorous ; one pupil was dilated and insensible, the other (the left) acted a little. He had no paralysis of either arm or leg, they were both rigid. On the right side of the head, over the squamous portion of the temporal bone, there was a wound merely through the scalp, about an inch and a-half long. His wife said that she had missed him in the morning, and that he was found in the street in his present state. Under the belief that the case was more a Medical than a Surgical one, the man was sent to Matthew Ward, and put under the care of the Physician of the day. He was ordered mustard poultices to the legs, and an injection was given him. About the middle of the day, a report reached the Hospital that before his admission he had jumped out of a window. He was now more carefully examined, but nothing like fractured skull could be discovered. The right hip and elbow were found to be bruised. He lingered on till the next morning, and died at eleven o'clock, having remained unconscious the whole time. On examining the head forty-five hours after death, there was found a great deal of blood effused between the skull and dura mater, just beneath the external wound. There was blood effused between the convolutions underneath the arachnoid, over the whole surface of the brain. There was a large clot of blood on the left side, between the dura mater and brain. On removing the brain a fracture was discovered, commencing in the squamous portion of the temporal bone of the right side, running through the petrous portion and through the sella Turcica. There was bloody fluid in the right lateral ventricle. There was no bleeding from the ear, although the petrous portion of the temporal bone was comminuted.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

EXAMINATION OF AN EYE FOUR YEARS AFTER A SEVERE BLOW—CICATRIX IN THE CHOROID.

(Under the care of Mr. DIXON.)

The following case is instructive in reference to the prognosis which may be given in cases of concussion of the eye-ball. It will be seen that although four years had elapsed, and although the process of reparation had been extremely good in the fundus of the eye, and the restoration of vision was almost complete, yet the pupil remained permanently in a state of slight mydriasis. There was, of course, nothing to be done in the way of treatment :—

John C., a lad, aged 16, from the country, applied at the Moorfields Hospital in April, 1861, to know if anything could be done for his right eye. He stated that he had had a blow on it four years ago. On being questioned, it appeared that the blow had caused him complete blindness in the injured eye for two days, during which he had much pain. After that he slowly regained a certain amount of vision. For a long time the "black part" of the injured eye had been noticed by his friends to be much larger than that of the other.

With such a history, it became a matter of much interest to determine the present condition of the organ. He could see to read with it, but not nearly so well as with the other. The left pupil was still somewhat larger than the other, and sluggish. In the cornea was a slight opacity, evidently of long standing. With the ophthalmoscope there was seen a small white streak in the choroid, a little to the outside of the yellow spot, where evidently a laceration had occurred, which had healed and left a scar. Everywhere else the fundus appeared perfectly healthy, and the humours were clear in all parts.

UNIVERSITY COLLEGE HOSPITAL.

RUPTURED FEMORAL ANEURISM—LIGATURE OF THE EXTERNAL ILIAC.

(Under the care of Mr. ERICHSEN.)

On Wednesday last Mr. Erichsen ligatured the right external iliac artery, for ruptured femoral aneurism. The man had only been admitted a short time before, and was only seen by Mr. Erichsen, for the first time, about three-quarters of an hour before the operation. The patient was a man, aged 64. The history he gave was very imperfect. All that was ascertained was that he for the first time noticed a small swelling in the thigh about ten days before, after taking a long walk. The swelling rapidly enlarged. It had, apparently, before his admission, been taken for an abscess, and treated by local applications. When Mr. Erichsen saw the man, there was a large swelling in the middle of the thigh, extending up the inner side of the thigh to the perinæum, and distending Scarpa's triangle, thus reaching to Poupart's ligament. There was considerable distensile pulsation, separating the two hands when placed over the tumour. Mr. Erichsen remarked that in a case of this kind it was necessary that something should be done at once. Compression was out of the question, and the only point for consideration was, at what point the arterial trunk supplying the limb should be ligatured. To tie the superficial femoral, if it had not been negatived by the probable diseased condition of the vessel so near to the aneurism, would have been impossible, from the great effusion of blood over it, and this latter reason would also apply equally to the ligature of the common femoral, and again, as had been so often pointed out, there were Surgical objections to the ligature of the common femoral artery. He, therefore, determined to ligature the external iliac. The patient was placed under the influence of chloroform by Mr. Clover. The artery was tied, and pulsation was at once arrested. Mr. Erichsen directed the patient's limb to be kept slightly raised, and to be wrapped in cotton wool. By the kindness of Mr. Lyon, Mr. Erichsen's House-Surgeon, we shall be able to give a full account of the progress of the case.

Medical Times and Gazette.

SATURDAY, AUGUST 10.

MEDICAL ETHICS v. HOMŒOPATHS.

The object of our Profession is to save life. In order that it may effect this object, it is necessary, not only that it should accumulate knowledge in its particular department of study, and use it for the public benefit, but that the conduct of its members towards each other and towards the public should be regulated by fixed and definite rules. If the Profession is intended to save life, whatever breeds want of faith in it, or want of honesty in its Professors, must tend to destroy life, and ought to be guarded against by Professional rules. Homœopathy is a system which utterly rejects and ignores all Medical tradition, experience, and doctrine, and sets up in their place an exclusive and arbitrary theory, which not only cannot be held with Medicine (as two independent truths), but which is utterly incompatible with it, and subversive of it. No man can believe both. It surely, then, is not only competent to the Profession, but a duty, to lay down rules for its own members, touching their Professional intercourse with the persons who practise Homœopathy. Such intercourse is not an offence against any law of the land ; anyone who chooses may indulge in it ; but it is an offence against good morals, good feeling, and a set of duties which are above all written law ; and it may fairly be punished by open contempt, by exclusion from Professional Clubs, Colleges, and Societies, and by all the means which consist in the with-

holding of confidence, courtesy, and the offices of mutual help. There is no law which prevents a man from mixing with blacklegs; but there is also no law to prevent his neighbours "cutting" him, if they choose.

The general principles on which rules should be based seem to us these:—That no favour, support, countenance, or sanction be given to Homœopathy or its professors; for by so doing life is endangered, because Medicine, which is a means of saving life, is disparaged. While this principle is adhered to with all due rigour against members of our Profession whose want of sense, or want of good faith, induces them to practise Homœopathy, care must be equally taken that the public, who, as we verily believe, err in good faith, from the purest ignorance, do not suffer. No life must be allowed to be lost, no sufferings to be protracted, through any unwillingness on our part to render our services. Whether a man has believed in Morrison or in Hahnemann, if he return to the fold of Legitimate Physic, we cannot punish him by withholding our services. Yet we must not render those services in such a way as to lead the world to believe that we sanction Homœopathy, or countenance its professors. But, since many men are brought into contact with professors of Homœopathy, and since they may enter into professional intercourse with them on mistaken principles, or through attending to one only of the two collateral principles we have laid down, we propose to enter into details, and to illustrate our remarks by putting a number of cases, *each of which is real*, and which may exemplify the rules of conduct which we believe to be correct.

The first case is this:—A respectable Practitioner is asked by a patient "who has a fancy for Homœopathy," to treat him homœopathically, "or, if you don't, I must go to a regular Homœopathist." We hold that it would be morally wrong to assent: it would lead the patient to think that the Practitioner believed in Homœopathy, and that he considered the homœopathic globules to be actual medicines. Or, if there were among the patient's friends any persons of acuteness, they would see that, as it is impossible for a man to believe two utterly opposite and contrary propositions, so he believes in neither—is, in fact, an infidel—is not in earnest, but follows a profession for his bread which he disbelieves in his heart. Of all charlatans, those are the most despicable who profess to practise either Homœopathy or Medicine at their patient's choice.

The second case is that of men who, for the sake of fees, make themselves "hacks" to the Homœopathists. A Homœopathic Practitioner is treating a case, and is uncertain as to the diagnosis: he induces a Physician to come to his house and examine a patient for him, or meets the patient at the Physician's house. The Physician makes the examination; gives the diagnosis; leaves the treatment in the Homœopathist's hands; and does this knowingly, deliberately, repeatedly, and of set purpose. By so doing, he is strengthening a system which is inimical to human life; and we hold that it is but fair play for his professional brethren to *cut* him, and to refuse consultation with him. They may fairly say, "Take your own line, and choose your own friends; but if you like to associate with men who (as we conceive) are trying to undermine a truthful and scientific and honestly-working Profession, you can't expect your own Profession to associate with you."

The third case is that of the Homœopathic hack, who consents to be called in, and to assure the friends of a dying patient that nothing more can be done. We will illustrate this by an example, of the truth of which we are assured.

A widow lady, who kept a day-school in a street running into Piccadilly, lost a child of diphtheria. The child was attended by an Homœopath. A Physician, who lives in the same street, and who had been a good friend to the schoolmistress, thought himself justified in writing her a letter, remonstrating with her in the kindest but strongest possible terms, for trusting her child to a man who, if honest, can use no remedies that are not inert; whose patients consequently cannot have the best chances of life; and who advocates a doctrine more likely to be wrong than right, because it is opposed to the experience of past generations, and to the convictions of the ablest living members of our Profession. He very soon received an answer, which turned his flank. He was told (as we are informed) that so far from any fallacious or inert system having been pursued, an eminent Surgeon had been called in, had pronounced the treatment correct, and had said that everything had been done that was proper. Now, if this tale be true, it signifies that a teacher of Surgery sanctions a line of treatment for diphtheria, from which bark, chloride of iron, mineral acids, and all other energetic tonics are excluded; and that he also sanctions a doctrine diametrically and radically opposed to all that which is taught in his own Medical School. Perhaps the case was quite hopeless, and he only said that "nothing more could be done." But he lent the support of his name and authority to men, who can only be called crazy enthusiasts, if they believe what they profess; but who, if they do not believe their own doctrines, are cruelly tampering with the lives of the public, and robbing their Professional brethren, who will not condescend to trade on imposture and quackery. The practical result was, that the mother's confidence in her Homœopathic attendant was confirmed by a Professor of Surgery. We will only accuse this Surgical Professor of inadvertence, of acting on what he believed to be one duty, without regard to collateral duties; he thought it perhaps his first duty to go and try to save the girl's life. The Homœopathist is, perhaps, a fellow-countryman, and had flattered him, or patronised him, and so, blinded by these considerations, he did what, if done with full knowledge of its purport, is a cruelty and scandal to his Profession and to society.

A fourth case is this:—A patient, accompanied by a Practitioner, calls on a well-known Physician, at his house in the morning, and requests his opinion in the usual way. The patient is examined and retires into the next room. The Practitioner says to the Physician, "I ought to tell you that I practise Homœopathy." The Physician writes a prescription, calls in the patient, and says: "This is my opinion on your case, and this the treatment I recommend; but I beg to say that I utterly disapprove of Homœopathy. Good morning!"

Again, a well-known Physician is asked to see a patient *with* Dr. Globulus and Mr. Sugar-of-Milk. His reply is, "I will see the patient and advise with him and his friends, and deliver my opinion in writing, if you please; but as I have the misfortune to differ entirely from those gentlemen on very first principles, consultation would be useless, and it would be more consistent with the respect due to all parties that we should not meet." This we hold to be the right course. Human life is respected, and Professional honour as well.

Again, a patient who wishes an operation performed, or to be attended in her confinement, requests a Physician to undertake the case. If he can take the whole responsibility, and treat her as he would any other patient, there is no reason why he should not. But if it be that he is merely to perform a mechanical act, that his duties are to cease with the expulsion of the placenta or with the excision of the tumour, and that he then leaves the case in the hands of the Homœopaths, we hold that he degrades himself to the level of the corn-cutter or the barber. Unless he have the command of the after treatment, he does but half release himself from responsibility, leaves the patient's life in peril, and dishonours his Profession.

The next case that occurs to us is this:—An eminent Surgeon is sent for in haste to do something on which a man's

life depends, say to relieve a distended bladder; or an eminent Physician to see a man in danger of death from any cause. He is recommended to the case and fetched by an Homœopathic Practitioner. Shall he go? Undoubtedly. It seems clear to us that if he is sent for to any such patient he is bound to go and relieve him as an act of duty to society. But that is only one half of his duties. He has duties to his Profession. He ought to say, "You send for me because I am in a position of eminence, to which I have attained partly by my own industry, partly by the favour of my Professional brethren. I dare not let this patient die; but neither do I dare let the world see that I despise my own Profession and appear to countenance quackery. Still less can I do so in a country place, where all the gains of the irregular Practitioners are necessarily subtracted from my own brethren. So I will go if you wish it, but I will not go with your Homœopath. I will either go alone or insist on having the family Medical Practitioner to meet me."

"But," replies the Homœopathic envoy, "the family Surgeon is unskilful and can't relieve the bladder."

"Then," the Surgeon should say, "I have duties towards him. Members of a liberal profession must teach as well as practise. I dare not consider my skill as created for my exclusive benefit. I'll go and show this man how I catheterise, and how he may if he tries."

"But then," says the Homœopath, "the Surgeon is nervous and ill-tempered, and the family don't like him."

"Then I will go alone, or you may telegraph to the county town for two of the leading men there to meet me. Your patient shan't die of a bursten bladder; but neither will I insult my Profession nor breed a belief in quackery which may destroy lives by the hundred."

So might a Physician or Surgeon argue who wished to do one duty and not neglect another. But if he choose to go in the open company of a Homœopath, and thus inflict an injury on his own brethren, he can't complain if his own brethren "cut" or blackball him.

Thus far we have been treating of cases in which our conduct ought to be guided conjointly by the duty towards society of saving life, and by the duty towards our Profession of upholding its honour and usefulness. We are obliged in frankness to admit the existence of two other duties of a private and personal kind, which may, under rare and exceptional circumstances, justify some modification of the rules we have laid down. These are the obligations of private friendship and of family relationship. These may compel a man, exceptionally, to go and see an old friend or a relative, and to examine into his condition, to advise, and possibly, even to hear what some Homœopath may have to tell, if one be in attendance. But these are cases which are, and ought to be, considered apart from merely public and Professional grounds. They are attended with circumstances superadded to all ordinary conditions of Professional life, and are matters which gentlemen and members of a liberal Profession would feel themselves debarred from enquiring into. If a man be known to be an honourable, orthodox, and hard-working member of his Profession, and one who has never for his own gain connived at the ill-doings of the Homœopaths, nor consented to be their hack, no one with the blood of a gentleman in his veins will pry into the reasons for his going to his wife's sister, or his own personal friend, though either be guilty of adhesion to Homœopathy.

We purposely omit certain trivial cases to which men of sense are wilfully blind: such as the case of persons who play with Homœopathy when a little sick, but send to a Physician when in danger; or who give (as is not uncommon) Homœopathic globules, or perform Mesmeric passes when the Physician's back is turned. A man must be badly off for occupation, who could think it worth while to notice such absurdities, or to attempt to argue them away. Silent contempt is the best treatment. As Jones of Nayland said, it is useless to deny what is called the "right of private judgment," because it is impossible to hinder a man from being a fool if he please.

We have thus attempted to put this matter on the clear basis of duty. We should be glad to see such a body of rules established on that basis as would protect young men from over-solicitation. A man ought to be able to say, "I can't consult with an Homœopath, because it is against the rules of my College." Besides, we can well imagine that some men whose line of education and of after life has been more *practical* than *speculative*, may never have thoroughly *thought out* these matters, or may have come to wrong conclusions in weighing a set of conflicting duties. From such men, the Profession would be glad to receive an acknowledgment of past mistakes, which, if frankly offered, would be generously received. No man need be ashamed to say, "I erred, because I did not see the case in its true light, but I will do so no more." Neither need any man be ashamed in a doubtful case to yield to the sentiments of the seniors of his Profession. We may add, that at the Bar, every Counsel, though nominally open to the whole world, yet may refuse business brought to him by a *black sheep*, or which would involve anything shabby, or contrary to his own honour, or that of his Profession.

THE WEEK.

At a meeting of the Council of the Royal College of Surgeons in Ireland, held last week, the following ordinance was adopted:—

"No Fellow or Licentiate of the College shall pretend or profess to cure diseases by the deception called Homœopathy or the practice called Mesmerism, or by any other form of quackery; neither shall they or any of them seek for business through the medium of advertisements, or by any other disreputable method. It is also hereby ordained that no Fellow or Licentiate of the College shall consult with, meet, advise, direct, or assist any person engaged in such deceptions or practices, or in any system or practice considered derogatory or dishonourable by Physicians and Surgeons."

The College of Physicians has adopted the following form of declaration to be taken by Licentiates on admission:—

"I engage not to practise any system or method (so-called) for the cure or alleviation of disease, of which the College has disapproved; nor to endeavour to obtain practice or to attract public notice by advertising, or by any other unworthy means. I also engage that I will neither permit nor sanction the use of my name by any other person for such purposes, nor in connexion with any secret or other remedy; and in case of any doubt relative to the true meaning or application of this engagement, I promise to submit to the judgment of the College. And I solemnly and sincerely declare, that should I violate any of the conditions specified in this declaration, so long as I shall be either a Licentiate or Fellow of the College, I thereby render myself liable, and shall submit to censure of the College, pecuniary fine (not exceeding £20), or expulsion and surrendering of the diploma, whichever the President and Fellows of the College, or the majority of them, shall think proper to inflict."

It having been stated that Sir B. Brodie had "repeatedly received fees from the hand" of a Homœopath, Sir Benjamin has authorised the publication of a letter, dated Betchworth, July 27, which contains the following very explicit declaration—one which will, we trust, effectually put a stop to all excuse for "meeting," "consulting," or "attending with" Homœopaths:—

"I feel confident that our Profession generally will do me the justice to believe that I would not, either directly or indirectly, do anything that would in any way sanction a system so absurd and nonsensical as I know the so-called Homœopathy to be.

"Having been in the habit of seeing, especially at my own

house, many patients attended by Practitioners of whom I had no knowledge, I cannot say that I may not by accident have occasionally seen some one attended by a Homœopathist; but I have never knowingly done so; and I do not think that any well-educated Medical Practitioner can honestly meet one of these Homœopathists in consultation. The only object of a consultation is to do good to the patient; and it is out of the question to suppose that any interchange of idea with one in whose professed opinions we have not the smallest faith, and whose notions, indeed, we cannot comprehend, can tend to this result."

A new system of gas-lighting is proposed by the United Kingdom Carburating Gas Company. The gas is passed through vessels containing naphtha, by which its illuminating power is so much increased that a saving of two-fifths can be effected. The great nuisance in all coal-gas is the sulphur, and we require a mode of generating pure hydrogen gas cheaply, and charging it with carbon from some source, such as naphtha, which does not contain sulphur.

The Census, so far as it relates to crowded and unhealthy places, ought to be taken oftener than once in ten years. This is well illustrated by the following passage from Dr. Letheby's recent Quarterly Report on the Sanitary Condition of the City of London. He had made, in former reports, the death rate too low, because he has estimated the population at too high a figure:—

"As for the death-rate, it is high, and shows a remarkable contrast with that of former years. This is mainly due to the new features presented by the recent Census; for, as I have said, instead of a population of nearly 130,000, which has been the basis of former calculations, the number is but 113,367. This brings the total death-rate of the quarter to an annual proportion of 24·5 per 1000. In the Eastern Union it was 24·9, in the Western 27·1, and in the City proper only 22·4. Undoubtedly, this is a high mortality; for in the Spring quarters of the last ten years the mortality in the chief towns of England has been but 23·5 per 1000, and that of the whole country but 22. It must not be forgotten, however, that the density of the population in the City is 157 per acre, whereas that of the chief towns of England is but 5."

Dr. Letheby speaks hopefully of the extinction of fever:—

"In the Spring Quarter of 1858 there were 280 fever cases attended among the poor by the Union Surgeons, in 1859 the number was 108, in 1860 it was 82, and in the quarter which has just expired it was but 29. This is a little less than 1 per cent. of all the sickness, whereas the average for the season is nearly 4½ per cent., and four years ago it was nearly 10 per cent. In fact, in the rest of London the proportion is about 2 per cent., and in some of the chief towns of England it is 2·1 per cent. This improvement in the returns is undoubtedly due to the operation of sanitary measures, and to the suppression of those influences which tend to foster disease among the poor."

The state of the Thames is likewise spoken well of:—

"During the quarter which has just expired, as well as that of 1860, the temperature of the river has not exceeded 62°, and there have been but slight signs of putrefaction. The conditions, therefore, which seem to be necessary for a high state of decomposition in the river are, a continued absence of rain, a hot spring, and a dry condition of the atmosphere. The temperature of the water must be over 60°, the rainfall less than two inches in the month, and the humidity of the air below 80. With these conditions there is not only a diminished supply of fresh water from the upper tributaries of the river, but the volume of the stream is still further diminished by rapid evaporation from its surface. Under these circumstances the daily supply of sewage becomes concentrated, the downflow of the current arrested, and oceanic water rises in the bed of the river to maintain its tidal level. Then it is that the mixture of sewage and sea-water putrefies and becomes a nuisance. This state of things may be predicated, not only by the temperature and dryness of the air, but also by the chemical composition of the water; for when the proportion of saline matter, at high tide at London Bridge, amounts to more than sixty grains per gallon, there is imminent danger of the river becoming offensive."

The state of the City pumps described by Dr. Letheby, confirms what has been already demonstrated by Dr. Dundas Thomson, and others. Bishopsgate pump contains 127 grains of solid impurity per gallon, and town wells owe the cool, saline taste of their water to the presence of organic matter in a state of decay.

We append the particulars of a melancholy case which has just occurred at Bideford:—Miss F. A. Rowland, governess to Lord Clinton's family, during a visit to friends at Bideford, became indisposed, and sent to a chemist's for a prescription. On taking the medicine she became very unwell, and died in a few hours. An inquest was held, when the following verdict was returned,—"Died from taking laudanum, inadvertently supplied by Thomas Griffiths instead of rhubarb." If further proof were needed of the necessity of guarding against the results of haste and ignorance, it would be furnished by a melancholy case of accidental poisoning which occurred at Dollar last week. Mr. Vaughan, a gentleman who had realised a large fortune by mercantile pursuits, finding himself to be unwell, went down stairs and took what he supposed to be an emetic. Unhappily, it proved to be tincture of aconite, and before a Physician could arrive Mr. Vaughan was beyond recovery. Had either the laudanum or the aconite been kept or supplied in a bottle of a peculiar shape—such as those of Messrs. Savory and Moore—both these deaths would have been prevented.

One of the Dental Licentiates of the College of Surgeons—Mr. Bromley—has been elected Dentist to the South Hants Infirmary. Mr. Payne, a Member of the College of Dentists, gave the following reasons for not qualifying himself to oppose Mr. Bromley:—

"The rules of the Institution made it imperative that a candidate should possess the diploma of some 'legally-constituted body.' He was afraid that the Governors of the Institution generally did not understand, or were not aware, that there was no 'legally-constituted body,' except the College of Surgeons, that did grant a dental diploma. Not having obtained a diploma from that body, he (Mr. Payne) was ineligible, and therefore had not offered himself as a candidate for the dental appointment. But he did not think it was right, or proper, or just towards individuals like himself, who was a native of the town, and articled in the town, to make such a condition. He was one of those individuals who signed a document setting forth that in his belief he considered it would be better for the Medical Profession, and for the Dental Profession, as well as for the public generally, if the Dentists were a distinct and separate body; and how could he, after having done that, consistently go to the College of Surgeons, and ask for their dental diploma? He could not do so, because he was backed by the opinion of no less than 3000 Medical Practitioners throughout England. This was the reason why he did not accept the kind offer which had been given him of applying to the College of Surgeons. He (Mr. Payne) was not there to sit in judgment upon the acts of the Governors, for they were at liberty to do as they might think proper; but as one of the original Governors, he must express his regret that they should have made such a condition imperative, because it was casting a kind of slur on persons like himself, who felt that as Dentists they ought to be a separate and distinct body, and ought not to be in any way mixed up with the College of Surgeons. At the present time there are about 1600 Dentists in practice throughout England and Wales, and of that number only between three and four hundred have thought proper to avail themselves of the certificates or diplomas of either of the Institutions by which they are granted; consequently, there are many hundreds of the most eminent men in the Profes-

sion who say, 'What have we to do with a diploma?' they have been in practice a great many years, and do not think it necessary to obtain a diploma as a proof of their qualification; so that the great majority of the Profession do not value the dental diploma. It was quite right that in regard to the next generation they should endeavour to raise the character and position of the Profession; but they ought not to make retrospective laws."

Murder and suicide, the latter in general less effectually perpetrated than the former, are fearfully prevalent. An old Welshwoman, aged 76, murdered her husband, aged 80, and then attempted to cut her own throat. She was sentenced to death, but recommended to mercy on account of her age.—One Cogan, a costermonger, murdered his wife in Newton-street, Holborn, on Friday. There was a wound in her neck, eight inches long, which had divided the trachea, muscles, and great vessels. He then cut his own throat, but not so severely but that he was able to walk out, and was taken to King's College Hospital. The wretches had been squabbling over the drink that follows an Irish funeral.

Articles have appeared in the *Edinburgh Courant* which offer a fair criticism of the proceedings of the Medical Council, and which afford some hope that the existing competition between Scottish Colleges and Universities may be put a stop to. The writer justly desires publicity of the proceedings of the Council:—

"We have no hesitation in stating it as our opinion that reports of the proceedings of the Medical Council are due not less to the Medical Profession and the public than to the Council itself. The fact of its deliberations being secret tends greatly to diminish its influence—prevents it from reflecting and directing public opinion as it might and ought—and, still more, tends to remove it in great measure from that wholesome influence of public opinion which is so congenial to British representative institutions, and which is so beneficially brought to bear upon them by those able and accurate reports of their proceedings for which we are indebted to the reporters for the press."

He confesses the failure of the Medical Act *to put down quackery*, which, as sensible people acknowledge, can only be put down by improving the popular intelligence:—

"Whilst the Medical Act was not intended to prevent, directly, at least, the irregular practice of the healing art, it was intended to prevent irregular Practitioners from assuming piratically Professional titles to which they had no right. It was intended to guard the public against being cheated, unwittingly, in this way. It must however, be confessed that the clauses of the Medical Act, which had this legitimate object in view, have been found, to a large extent, we might almost say wholly, inoperative."

He greatly desires a Medical Acts Amendment Bill, yet thinks that the delay of another year "may not be disadvantageous," and concludes almost in the words of our late leading article on the Work of Universities and Colleges:—

"Let the policy of the Scottish Universities as regards Medical Degrees, which has hitherto been one of fear and distrust, and conducted in too great measure with the view of increasing the quantity of graduates, become now more liberal, more generous, more enlightened, and having regard to quality (we mean particularly as regards literary and scientific academic training), not less than quantity, and our great Scottish Universities, which have opportunities for teaching Medicine second to no schools in the world, and comprise distinguished teachers whose fame extends wherever Medicine is known as a science or practised as an art, will have no cause to regret that they have at last, however tardily, assumed their proper position as Universities. This will bring them more credit than the establishing of Bachelorships in Medicine and Masterships in Surgery, so pitched purposely as to enable them to compete with the licences of the Colleges of Physicians and Surgeons—an illegitimate competition, success in which can bring no credit to the Universities, and may tend to cripple, or even destroy, the Colleges—Institutions which, peculiar to Great Britain, have done much to consolidate and elevate the Profession. These Colleges, we doubt not, are quite ready to acknowledge how much they, the Profession, and the public, owe to the Universities; but surely it may be said with equal truth, that the Universities are under obligations in no degree less to the Colleges. There is ample 'room and verge enough' for each of these important institutions in their own particular sphere. Their duty and their interest alike dictate that they should pull with, not against, each other."

Murders have so multiplied of late, that the frightful case at Kingston, in which the wife of a serjeant murdered her step-sister, in March last, has been well-nigh forgotten. The wretched woman was tried at the Kingston Assizes on Monday, when evidence was given of several instances of suicidal insanity in her family, and of herself having laboured under melancholia, so she was acquitted on the ground of insanity, but ordered to be detained during the Queen's pleasure.

Much excitement has been caused in Whitechapel by the discovery of a human body under the flooring of the gallery of the church. It appears to have been the body of a child with a large head, which was discovered when the church vaults were opened and re-arranged before being finally disused for interment, and was probably purloined and secreted by one of the officials who hoped to make some money out of it.

A CURIOSITY OF THE MIDDLE AGES.

Some time ago the Percy Society published a short satirical poem from a manuscript in the library of St. Peter's College, Cambridge. In style and language it will be found, generally speaking, to resemble the old English of Piers Ploughman's Creed and Vision, and the date from internal evidence must be about the year 1320. It is, therefore, one of the very earliest compositions of this kind in the English language. The versification is in rhyme, with occasional examples of alliteration, and the author does not, as was the habit of his immediate predccessors who wrote in the Latin language, confine his censures to any mere abstractions, such as pride, avarice, and simony, but proceeds to a direct attack on all states and conditions of men—the Pope, clergy of all degrees, physicians, knights, barons, squires, ministers of State, advocates, attorneys, and merchants. The poem is one volley of unmitigated invective, and all classes are denounced as finding their chief pleasure in victimizing the poor. There was much reason for these complaints, and probably writing of this kind was the only corrective which that age could have appreciated. No doubt this and such like poems had great influence in predisposing the populace for the Lollard doctrines, as well as in urging them to Jack Cade excesses. We offer that short portion of the poem which relates to the Medical Profession, as a literary curiosity, which our readers would not otherwise be likely to see in a publication so restricted in its distribution. We have no objection to looking into an old mirror, even if its roughness does reflect a few class evils and misdoings a little out of due proportion. It is vain to wish for absolute perfection among ourselves any more than in the rest of the world, but if there be any who feel themselves aggrieved by the making public such an exposure of what was wrong among their prototypes four hundred years ago, everyone must know the secret cause of their sensitiveness.

Yut ther is another craft
That towcheth to clergye,—
That beth thes fisisiens
That helpeth men to dye.
He wol wag his uryn
In a vessel of glass,
And swer by seynt Jon
That he is seker than he was,
And seye,

"Dame, for defawght
The god-man is i-sleye."

Thus he wol affray
All that ben therinne,
And mak many lesyngs
Sylver for to wynne:
After that he wol begynne
To confort that wyf,
And sey, "Dame, ley cost, (pay the fee)
And we schul save his lyf"—
And lye,
Thow he be never the wyser
Whether he wol lyve or dye.

Furst he wol begynne
To blere the wyfs eyye; (to impose upon her)
He wol aske half a pownd
To bygge with spiserye; (to buy spicery with)
The eyght shillyngs schul up
To wyn and to ale,
And bryng him rotys and rynds
Bretful[1] a male[2] ([1]brimful) ([2]a chest)
Of nowght:
Hit schal be dere i-now a leke
Wan it is al i-browt.

He wol preise it fast
And swere as he were wod, (mad)
For the kyng of Ynglond
The drynk is swet and god,
And gif the gode-man to drynke
A gode quantité,
And make hym wers than he was;—
Evel mot he the, (thrive)
The clerke
That so beryth awey that selver
And falselich dothe hys werk.

He wol byd the wif sethe a caponn
And a pese of bef;
The gode-man schal have never a mossel,
Be he never so lef. (desirous)
He wol pike hit hymself
And make his mawe towt,
And gif the gode-man to drynk
Lene broth that is nowght
For the sek:
(He who) That so bygileth the gode-man
Godd's cors on hys cheke.

He maketh hym al nyght at ese
As wel as he can,
And loke that ha fare wel,
Hors and eke man:
A-morow he taketh the uryn
And waggeth in the sunne,
And seyth, "Dame, blessed be God!
Thi maystre is i-wonne
And lyketh: (thriveth)
Thus he bereth awey that selver,
And the gode-wyf biswyketh. (cheateth)

Certes, and by my sowle,
This world is al beshrewed;
Muche thei fare with falsenes
Bothe lered and lewed. (learned and lay)

THE EPIDEMIC OF ERYSIPELAS AT PARIS.—Both in Hospital and civil practice erysipelas has prevailed in Paris to a vast extent during the last few months so as to prevent the performance of any but indispensable operations. Of a slight description at first, the epidemic has gradually assumed a graver character, until now it is attended with the most fatal results. Several Practitioners and students either in the town or Hospitals have fallen victims to it, the best Hospitals, such as Lariboisière, having furnished some of the worst cases. It is probable that an epidemic of this disease of similar extent and intensity has not been witnessed in Paris, nor does it at present exhibit signs of declining. The numerous topical applications which prove of use in ordinary epidemics are now of no avail, nor have any general measures as yet proved more efficacious.

REVIEWS.

Heads of Lectures on the Practice of Medicine, for the Use of Students. Part I. General Diseases. By ANDREW ANDERSON, M.D., Lecturer on the Practice of Medicine in Anderson's University, Glasgow. Pp. 47. London: 1861.

THESE "Heads of Lectures," of which the First Part is before us, are such as the Lecturer may be supposed to have himself used in his oral teaching, or such as a diligent student may be imagined to have taken down in his note-book. We can readily conceive the value which the publication of these notes will prove to the members of Dr. Anderson's class, to whom each line will recall at once the forcible teaching of their instructor. To others who have not had this advantage, these "Heads" will constitute a summary of principles and practice, embracing that which it is absolutely essential that a student should know, who presents himself for examination in the elements of Medical Science.

The Part now published includes subjects generally introduced early in a Medical course—viz., Etiology, Diseases of Nutrition, Diseases of the Capillary System, Inflammation, Blood Diseases—including Diseases of Assimilation—Virulent Diseases, as Syphilis, and Glanders, and Fevers. The Part concludes with an "Index of Remedies," in which remedial agents are classified, and their doses or mode of use assigned.

As an illustration of the mode of arrangement of his matter, we quote what appears under the head

"DIABETES.

"The urine is loaded with sugar; of which the readiest test is its becoming brown when boiled with aqua potassæ; it is usually pale, very abundant, and of sp. gr. 1030—1045 (the natural quantity being 40—70 oz., and the sp. gr. 1017—1025).

"Thirst, advancing debility, usually emaciation, with cutaneous boils, and sometimes cataract, are the chief *symptoms;* but many of the cases are slight.

"SUPPOSABLE CAUSES.

"1. A supply of saccharine food, or amylaceous matters (convertible into sugar) greater than can be consumed in respiration.

"2. An undue formation of sugar in the stomach (McGregor), and of sugar, or matter convertible into sugar, in the liver (Bernard).

"3. A peculiar state of the nervous system; as after over-fatigue, or a fall on the head (Camplin), affecting probably the fourth ventricle, which has been found diseased.

"TREATMENT.

"1. *Abstinence from sugar and starch*, in fruits, vegetables, potatoes, bread, wines, etc.; *retaining* green vegetables and onions, and all sorts of nitrogenous articles, as meat, fish, milk, etc., with butter and bran bread (Camplin). The drink to be limited.

"2. *Treat the dyspepsia;* by managing the diet; by bitters, pepsine, mineral acids, etc., according to symptoms.

"3. *Soothe and strengthen the nervous system;* by rest, small opiates, nux vomica, etc.

"4. *Derive to the skin;* by warm clothing, friction, the hot air bath (occasionally)."

We expect to see these "Heads of Lectures" become a favourite book with all classes of Medical students.

The Blind: their Capabilities, Condition, and Claims. An Essay dedicated to the Society for Improving the Social Position of the Blind. By ALEXANDER MITCHELL, Hon. Sec. (himself blind.) Pamphlet, Pp. 48. London: 1860.

THIS is one of the most painful books we have ever read, inasmuch as it exhibits the griefs and passions which burn under the apparently placid features of the blind. The writer complains that the blind are in some countries persecuted, as if judicially smitten by Providence, whilst in others they are regarded as a kind of animal pet by their friends, and looked upon with great jealousy when they attempt to earn their own living, lest they should lower the price of labour—the same argument which is used against employing women. Mr. Mitchell tells us that—

"A father wished to apprentice his blind son to a trades-

*

man who had several sighted mechanics in his employ. The master, having tested the mechanical ability of the lad, consented; but his men refused to work for him any longer, on the plea that he intended to place the blind on an equality with themselves."

Even as musicians, when they chance to excel in their art (for every blind man is not born a musician), they are often coarsely repulsed. Church music is no resource for them in London; yet there are forty blind organists in Paris, where the nature of the duties is much more complex.

The writer feelingly describes the concentrated mental efforts which blindness constantly involves. Four senses have to do the work and make the *corrections* which, under happier auspices, are done by five. Hence "the effect of ten hours' labour on the brain of a blind mechanic is equivalent to that of fifteen hours of a sighted one."

Still more bitterly does he describe the difficulties which blindness puts in the way of marriage, although there are no persons of any other class who so peculiarly need the tenderness and conscientious care of a domestic partner, and who are more susceptible of amatory feelings.

He speaks, too, with some warmth, of the injudicious manner in which many of the efforts to educate the blind are made, and of the hypocrisy and infidelity generated amongst them by a too severe imposition of religious forms, and the use of the Bible as a text-book. The education which the blind receive is inefficient and yet costly. "The School for the Indigent Blind in St. George's Fields, has an income of £10,643, which is expended on 154 inmates, thus showing that every one of these, either directly or indirectly, costs the establishment about £69 per annum." Considering, then, that each pupil commonly remains seven years in the School, the annual cost added up, with five per cent. compound interest, would amount to £600, which would provide a permanent income of £30. We regret to find that "the official report of the same institution for 1859 shows that such an annuity is more than treble the amount of the average earnings of the very few who do obtain employment on quitting the establishment."

Still more are we disgusted at Mr. Mitchell's account of the sums that have been squandered on pet systems of printing for the blind, and the amount of party feeling existing amongst the inventors and their cliques; and this because "sighted" persons judge of matters which the blind only can be capable of determining.

"The committee of one of the most important institutions in the United Kingdom have recently discovered that the type of the embossed Roman capitals is too small for the touch of blind adults; yet this type was introduced under the auspices of the inventor of the system, and during the last quarter of a century strenuously supported by the committee alluded to. Had the blind themselves been consulted in the outset, such a grave error could scarcely have been committed."

We have given more space than we can well afford to Mr. Mitchell's book, in order that any of our readers who may possess spare time, money, or energy, may know that there is a great deal of relievable but unrelieved misery amongst the blind.

Royal Medical and Chirurgical Society. — The Library will be closed (by order of Council) from Monday, August 19, to Saturday, September 14, both days inclusive. Books taken out by Fellows of the Society previous to August 19, will be allowed to remain in their possession during the time the Library is closed, and any work particularly wanted by a Fellow during the same period may be had on the third day after special application by letter only.

Apothecaries' Hall of Ireland.—At a meeting of the General Council, held according to Act of Parliament, on Thursday, August 1, the following gentlemen were elected as the Court of Examiners for the ensuing year:—*Governor*, Dr. Holmes; *Deputy-Governor*, Jerome O'Flaherty, L.R.C.S.I.; *Directors*, Drs. Betty, Bolland, Leet, Madden, Madden, Jun., McMunn, Mulock, Nolan, Owens, Shea, Wyse; Thomas Collins, M.R.C.S., and Christopher Shaw, M.R.C.S.

Royal College of Surgeons in Ireland.—At a meeting of the Council held on Friday, the 2nd inst., John Morgan, Esq., F.R.C.S.I, was unanimously elected Professor of Practical and Descriptive Anatomy, in the room of Dr. Power, recently appointed to the Chair of Surgery.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE TREATMENT OF FRACTURES BY SIMPLE EXTENSION.

By Dr. SWINBURNE.

In a paper read before the Medical Society of New York, Dr. Swinburne strongly recommends treating fracture of the long bones by mere extension, regarding splints not only as an unnecessary apparatus, but as one which may do mischief. "All that Nature requires for perfect union of bone is rest and a moderate degree of excited action, while all pressure by splints, bandages, etc., only impedes the process of reparation; and this pressure, in my humble opinion, is a prolific cause of non-union. While Nature requires rest for bony union, she requires also perfect apposition for union without deformity. How is apposition to be effected? We start with the knowledge that a muscle cannot be extended beyond its normal capacity; and that any attempt to go beyond this, not only produces resistance, but a tearing of the muscle. Take, for instance, a fractured thigh-extension of the extremity, by a strong man, will stretch the muscles to their normal length only, which fact can be shown by the most careful measurement, proving that the danger of too much extension is imaginary. With the muscles drawn out to their normal state, what becomes of the bone? Where can it go if not to its normal position, with the fractured ends in contact? Assuming the position that the extended muscles act as permanent adjusters of broken bones, and are in reality, the only means by which the fracture is maintained in apposition, I ask of what use are all the mechanical appliances and apparatus called surgical splints, if not to effect the above-named results? The splint beyond this, possesses no practical worth; on the contrary, it is apt by its too careful adjustment, to impede the reparative process, by interfering with the circulation of the part. . . . . Then, we may say, that in extension, the muscles and other investments of the bone are the true splints, and that there is but little exception to this principle being universally applicable. Surgeons in remote parts of the country have to act and not to originate. They see comparatively few cases, and are the possessors of fewer instruments and surgical appliances. They may be called a number of miles to see a patient, and find that the appliances which they are in possession of do not answer the purpose. What are they to do? Send for some one at a distance, thereby wasting much time and entailing much unnecessary suffering. If we can treat any fracture occurring in the leg or thigh, from the hip to the foot, simply by a perineal belt and extension from the foot, without any splints, and make better results, with more comfort to the patient, and with more speedy recovery of the use of the limb, we have surely arrived at the grand desideratum; and when the treatment of fracture of the arm or forearm is rendered as simple, we have, I apprehend, arrived at the *ultima Thule*. As for myself, I employ this treatment indiscriminately, and I only ask my Professional brethren who have the opportunity to try it, and I am sure that they will be able and willing cheerfully to bear witness to its entire efficiency. I have now treated over forty fractures of the femur and tibia, and in no instance have I ever seen over half-an-inch shortening (this, of course, does not include intra-capsular fractures, where there is always more or less deformity), while in the majority there was no shortening at all, nor were there any of these that resulted in a non-union.

"In fracture of the femur I use simple extension and counter-extension, without splints, and in the leg I sometimes do the same. At other times I effect extension and counter-extension through the medium of a delicate splint and an equally delicate foot-piece fastened to the foot by means of strips of adhesive plaister, while the counter-extension is made from the knee by adhesive plaister looped about the limb below this joint. Then, by means of a strong cord passed through this loop and thence through a hole in the side splint, some distance above the knee, the requisite extension can easily be made. If, after full extension is effected, it should appear that the limb is not sufficiently steady at the seat of fracture, the application of strips of plaister around

the limb and splint, at intervals of three or four inches, will accomplish all the indications. If the fracture of the leg happens to be near the knee-joint, I am in the habit of using the perineal belt, made large, full, and easy, as in fracture of the thigh. In compound fractures of the tibia and fibula, extension is especially applicable, and I may say indispensable. . . . . The fractures of the upper extremities are subject to the same laws, and require the application of the same principles. But, owing to the fact that the patient is not confined to bed, the extension and counter-extension are necessarily made through the medium of a splint, while in fractures of the lower extremities the *bed is the splint*, the foot of the bed being the point of extension, and the head-piece the counter-extending point. In fracture of the humerus through any part of its shaft simple extension can be made by having a splint extending three inches below the elbow and the same distance above the shoulder. The elbow is secured to the lower part of the strip of board by means of adhesive plaister passed through a fenestrum, while to its upper end it has fastened the extremities of an axillary belt. We are thus enabled to obtain full extension and counter-extension with comparative ease and comfort to the patient, the muscles making the only true splints. In the treatment of fractures through the shaft of the radius, or radius and ulna, I use a simple splint situated on the posterior part of the forearm, fastened at the bend of the flexed arm by adhesive plaister, and the other end to the wrist by the same method, so that you get extension of the muscles to their normal condition, and also by this means approximate the ends of the bones. But inasmuch as the line of extension is not direct, and the bone is disposed to bow forwards, a few strips of plaister applied loosely around the arm and splint, at intervals of two or three inches, will keep the line of the bones correct. Colles' fracture, which consists in fracture of the radius near the carpus, and dislocation of the ulna, presents one of the most troublesome forms of fracture that the Surgeon is called upon to treat. This last appliance has in my hands been very successful in the treatment of this accident, though I am obliged to use a compress in the concavity of the wrist in order to give the ulna sufficient posterior prominence."

For fractures at the elbow-joint the author has contrived the following apparatus, through which extension and counter-extension may be performed by simply flexing the fore-arm: —The instrument is made by taking two pieces of board a quarter of an inch thick, fastened at the bend of the elbow by a hinge two inches wide, the lower portion extending from the elbow to two inches below the fingers. The short portion extending from the elbow to the shoulder terminates in a crutch for counter-extension. The lower end of the splint is fixed to the hand and fingers by plaister, the other to the arm by the same means, or to the axilla by the crutch. When the arm is flexed, from one to two inches of extension will be produced, according to the diameter of the arm. This form of dressing is especially applicable to fracture of the ulna and dislocation of the humeral portion of the radius, fracture of the humerus through the olecranon and coronoid processes, and where the fragment is displaced with the ulna. The complication of displacement of the head of the radius, or even fracture of the bone, need not alter the mode of procedure. The author appeals to the success of the usual treatment of fracture of the clavicle as proof of the soundness of the principle he advocates. And even this he thinks may be simplified by fastening the clothes, or a strong closed waistcoat firmly behind, with the arm in a proper position, and thus dispensing with bandages altogether.—*American Medical Times*, Nos. 8 and 9.

EXCERPTA MINORA.

Vegetations on the External Genitals during Pregnancy.—M. Thibierge relates some cases, in addition to others which he has published, with the object of showing that the vulvo-vaginal vegetations sometimes observed in pregnancy, are, in fact, induced by the condition of gestation, and do not depend, as is generally supposed, upon venereal affection. This view may be of importance sometimes in Medical jurisprudence. He recommends that surgical interference should be abstained from, unless the vegetations are excessively large, and persist not only after delivery, but after the return of the menses.—*Gazette Hebdomadaire*, Nos. 6 and 7.

Accidents from Lightning.—M. Boudin, referring in the *Recueil de Mémoires de Méd. Militaire, Tome* iv., to accidents caused by lightning to two soldiers, remarks upon the extreme rarity of these met with in armies, when we take into account the manner in which troops are dispersed over elevated portions of ground and other exposed situations, often with bayonets attached to the muskets during storms. A Governor of Genoa has, however, deemed it necessary to prohibit the sentinels to retain their arms in one of the forts surrounding that city, the muskets having been believed to be a principal cause of the descent of lightning at that particular post. A very curious fact, is the greater liability of men than women to these accidents. Thus from 1815 to 1840, the victims of lightning amounted on the annual mean, to 5·78 males and 3·88 females. From 1852 to 1856, there were in England 83 males, and but 15 females struck by lightning; and in France from 1854 to 1858, there were 316 male victims, and but 112 female victims. This discrepaney of numbers is not explicable, as it has been stated to be, by the less exposure of females in the country districts; for in many parts the females are, in faet, more employed in the fields than the men.

Case of Congenital Absence of the Uterus.—Professor Gintrac, of Bordeaux, relates an interesting example of this occurring in the person of a girl, 18 years of age, who had never menstruated. The amenorrhœa was attributed to the wretched conditions amidst which she lived; but the frequently occurring hæmoptysis and epistaxis gave rise to the application to the anus of leeches, in the hope of establishing the menstrual flux. After death *ramollissement* of the brain was found to exist. The external genital organs were normal in their development. The bladder and rectum were in immediate contact with each other, the peritoneum, which passed from the posterior surface of the former, producing folds on each side resembling the broad ligaments and containing the ovaries. Not a trace of vagina or uterus existed. Each ovary, flattened in form, was divided into two lobes, and from each a rounded cord proceeded and lost itself in the peritoneum, probably representing the Fallopian tube. The author has also brought together the chief peculiarities of more than thirty published cases.—*Gazette Médicale*, No. 4.

Cases of Spontaneous Evolution in Arm Presentation.—Dr. E. Arnold relates two cases of arm presentation in which some difficulty or delay in attempting to turn having taken place, spontaneous evolution occurred, and the children were born, the head presenting. One of them was less than 7lbs. in weight, but the other was above the average size. Both children were born dead, and the mothers had borne children before.—*American Med. Times*, No. 23.

Application of Collodion in a Case of Phlegmatia Dolens.—M. R. de Latour relates a case of *phlegmatia dolens*, attended with great local tumefaction and increase of heat and by fever, as shown by a pulse of more than 120, which rapidly yielded to the application of a mixture of collodion and castor-oil. This is only one of a series of observations by the same Practitioner, demonstrating the high value of impermeable applications to the surface in inflammation. According to his theory, the primary circumstance in inflammation is an increase of animal temperature, an increase which is maintained as long as the surface is allowed to remain in contact with the air. Inflammation is a local exaggeration of calorification as fever is a general exaggeration of the same function, and cutting off communication with the air is the most certain means of reducing such exaggerated action.—*L' Union Médicale*, No. 7.

Hereditariness of Epilepsy.—M. Petit, Physician of the Asylum of the *Loire Inférieure*, from his own observations and the examination of the statistics of other writers, comes to the conclusion that epilepsy is quite exeeptionaliy hereditary, and when such transmission does take place, it seems to do so more frequently on the side of the mother than that of the father.—*Moniteur des Sciences Méd.*, No. 26.

Diarrhœa in Pregnancy.—Dr. Lizé observes that much attention has been paid to the obstinate vomitings which occur during pregnancy, but little notice taken of the severe diarrhœas which sometimes occur. He relates a case that occurred in his own practice, in which, all treatment having failed, and the patient's powers becoming exhausted, he proposed the induction of premature labour at the seventh month. Consent was refused, and at the eighth month a child was born, which soon afterwards died. The author throws out for the consideration of the Profession whether, in these cases of incoercible diarrhœa, the welfare of mother and child does not

justify resorting to the induction of premature labour.—*Union Med.*, No. 7.

Preservation of Adhesive Plaister.—In order to prevent the peeling off of the plaister from the calico on which it is spread in the form of strapping, which takes place from its drying up, M. Chassaignac recommends that the roll of strapping should be kept in a large glass receptacle, and with it should be placed a small tube, containing a sponge soaked in water, the evaporation of which would prevent too rapid desiccation.—*Presse Belge*, No. 30.

FOREIGN CORRESPONDENCE.

AMERICA.

New York, July 15.

SECESSION FEVER.

About ten years ago, when Radicalism ran very high in Europe, I remember, while on a visit to Berlin, witnessing the degree of M.D. conferred on a gentleman, who for his dissertation had selected a theme very much in accordance with the spirit of the time. The title of his *thèse* was "De Morbo Democratico, Nova Forma Insaniæ," and a very fierce disputation followed his propositions. At the present time, a Doctor might, with equal propriety, choose as his theme "De Febri Secessionis, Novo Morbo Zymotico." Secession fever is, in fact, at present the only important epidemic which reigns in those once United States, and a rapid atrophy of stars and stripes seems imminent. Even in the wards of the Hospitals and the lecture-rooms of the Medical Schools little else than politics is discussed, and for the time being, science is put quite in the shade. This fever of Federalism and Secession is so much the more violent, as the Americans, even in ordinary times, seem to be labouring under some acute disease. What is looked upon by the quiet European as "excitement," is the norm here, and what the Americans consider "excitement," you would call frenzy. Among other things, the way of eating here is positively painful. The Americans bolt their food, hot and cold, chowder, oyster-soup, roast and boiled meat, pastry, molasses, gélée, etc., *pele mele*, without stopping to masticate or to speak, and no doubt this habit is in a great measure the cause of the enormous amount of indigestion which prevails in this country. This is, of course, greatly increased by the preposterous quantities of medicine taken. No trade flourishes so well in America as that of charlatans; one scarcely meets with an American whose pockets are not filled with pills, powders, mixtures, life elixirs, and universal panaceas, etc., prepared and advertised by quacks. These fellows make the largest fortunes, and live in the most magnificent style in this country. Opium, mercury, arsenic, and strong purgatives are the most common medicines. These and the tobacco chewing which pervades all classes of society, are most detrimental to health, and have contributed greatly towards deteriorating the race. Those born in this country are sickly, slender, thin-legged, unhealthy, and lax-fibred, they are unable to do heavy work, which is almost exclusively performed by negroes, Irishmen, and Germans. The women are certainly pretty, but their beauty is of a delicate and somewhat of a languishing character; most of them being pale, nervous, and hysterical.

ETHER AND CHLOROFORM.

The old question as to the superiority of ether over chloroform as an anæsthetic agent, has again been taken up by the Society for Medical Improvement of Boston. Brother Jonathan being the discoverer of ether as a narcotic remedy, and the Massachusetts General Hospital being the place where anæsthesia was first induced for a surgical operation, he is, of course, very partial to this his darling offspring, and resents the rivalry of chloroform introduced to the world by John Bull, Esq. By many fanatical patriots in the Medical Profession of this country, chloroform is still looked upon as an abominable mixture, which is sure to kill the patient; and every fresh case of death from chloroform, which is reported from European Hospitals, is triumphantly paraded as a confirmation of this view. New York and Boston are rejoiced to see such a high surgical authority as Professor Palasciano, of Naples, condemning chloroform and exclusively employing ether; and when, some time ago, the Medical Society of Lyons pronounced against the former, this victory was celebrated with great glee. The Society for Medical Improvement of Boston has recently appointed a Committee to inquire, if death through the employment of ether has ever taken place; but it is evident that, even if it should be shown, that under ether only a few, and under chloroform many, fatal results have been observed, this cannot be regarded as proof of the greater innocuity of the former, as, on the whole, one surgical operation is made with the help of ether, where a hundred take place under the influence of chloroform.

TURKEY.

Constantinople, July 20.

EUROPEAN MEDICINE IN TURKEY.

The space allotted to me in your columns did not allow me to finish in my last letter my account of European Medicine in Constantinople; I therefore continue it to-day. Amongst the different European Physicians, the Italians were the first to settle here. Their mode of treatment, probably on account of its simplicity, has been generally adopted by the practising apothecaries and routiniers; and enjoys also the full confidence of the people. In cases of slight indisposition purgatives are given, and in every form of acute disease bleeding is resorted to. These means are highly esteemed by the population as preventive as well as curative, and during spring the Physician is often consulted by patients in good health upon the propriety of either taking purgatives or of having venesection performed. This question has, however, been decided beforehand by the patient himself, and if the Doctor should give a contrary opinion, this never convinces the patient, but only serves to destroy his confidence in the Doctor. The Physicians of the Italian school, who have been very numerous here, have done their best to render the debilitating mode of treatment popular. Until very lately the application of hundreds of leeches, and dozens of venesections was very common, and it is only quite recently that this terrible abuse has somewhat abated. It can be easily understood how difficult it has been, and still is, for the representatives of more modern and enlightened views on the treatment of disease, to maintain them where so very opposite notions have become deeply rooted in the minds of the people.

Among English Physicians who have succeeded in gaining the confidence of the natives, I may mention Dr. MacCuffog and Dr. McCarthy, who were generally known as the tall and little Englishmen (*buyuk Inglis; kutshuk Inglis.*) These gentlemen owed their success not so much to a thorough Medical education as to a deep knowledge of the customs and habits of the people, which they used with advantage. Dr. MacCuffog, an honourable and highly esteemed man, held the appointment of Physician to the English Embassy; he died some years ago, and his place is now occupied by Mr. Dixon, of the College of Apothecaries of Malta. Dr. McCarthy died during the present year in Cairo, to which place he had gone in consequence of ill-health. Dr. Sarell, an accomplished young Physician, and Dr. Millingen, well known as companion to Lord Byron, are also among the resident English Doctors. The most eminent of the French Physicians here is Dr. Fauvel, Delegate of the French Government to the Conseil of Quarantine, and Director of the Clinique at the Medical School. His name is also favourably known in Medical literature. Some time ago the number of German Physicians who had settled here was very considerable; but it has much decreased of late, and the most eminent amongst those residing here at present is Dr. Mühlig, Physician to the Prussian Embassy, and President of the Imperial Society of Medicine; Dr. Riegler, another German, who retired some years ago, was very popular with the natives; but the most distinguished career has certainly been that of Dr. Spitzer. This gentleman came to Constantinople some twenty years ago, in very straitened circumstances. Through the influence of Dr. Bernard, an Austrian, who was at that time Director of the Medical School of this city, he soon obtained the appointment of Professor of Anatomy, and after the death of his patron, he succeeded him as Director of the Medical Clinique. He was afterwards nominated Physician to the Serail, and became a great favourite of the just-defunct Sultan, Abdul Medjid. After having amassed a considerable

fortune, he left Constantinople in 1850 as Councillor to the Ottoman Embassy, at Vienna. When, about three years ago, the Sultan was affected by some very slight indisposition, Dr. Spitzer was immediately telegraphed for. Some time afterwards he was appointed Turkish Ambassador in Naples. Since the dethronement of Francis II. he has lived in Vienna, where he is still in the enjoyment of 15,000 piastres a month; and the official journal lately announced that he had received the Order of Medjidieh of the second class. It is not uncommon in this country for Physicians to enter the diplomatic career, but such examples generally occur amongst Mussulmans. The most eminent of the now living Turkish diplomatists, Fuad Pasha, Minister of Foreign Affairs, and who has just gained fresh laurels in Syria, was originally a Surgeon in the Turkish Navy; Ismael Pasha, late President of the Board of Trade and present Governor of Candia, originally a Greek, but who afterwards embraced Islamism, studied Medicine in Paris; finally, I may mention Salih Effendi, late Professor of Botany in our Medical School, and afterwards Under Secretary of State to the Board of Trade, who is now President of the Municipality of Pera and Galata. I shall have subsequently to mention some similar cases of good fortune, but on the whole the majority of Medical men here make only a scanty income and very many are in a precarious position. In consequence of the distrust inherent to the natives, they are constantly changing their Doctors, and, consequently, a constant private practice is possessed only by such few as have succeeded in gaining the confidence of a certain class of the population. Professional etiquette is at a still lower ebb than elsewhere; it often occurs that the patient does not think of calling in a Physician until the end of the disease, and then several are sent for on the same day, of whom each one gives his opinion and advice separately; the patient either follows none, or leaves the decision to the Apothecary who is generally guided in the matter by personal considerations and inclinations. Sometimes several Physicians are called upon to give an opinion together, and monster consultations, such as are not to be seen elsewhere, are the result: from five to ten Physicians surround the bedside, each of whom gives his opinion and sticks to it, so far as his Professional interest is concerned. It is fortunately the custom to pay the fee at every visit, or the Doctor's services might be forgotten the next day. Among the nations which cross each other here the Armenians have the least confidence in the Medical man; they are cunning and false, and their qualities are so natural to them that they cannot believe others deserve that confidence of which they feel themselves unworthy. The educated Greeks of the commercial classes are very different in this respect: many of them have lived for some time in the West, especially in England, and these have generally unlimited confidence in their Physicians, unless this is forfeited by incautious and vascillating behaviour. Ignaz Spadaro, an accomplished Physician and native of the Greek island of Tenos, was educated in Paris; he enjoys a well-deserved reputation with a large part of the European colony, and is one of the few Medical Practitioners who possess an extensive and constant practice. In those cases where the Turks prefer a European Physician to a Spanish Jew or a Greek Apothecary, they mostly place full confidence in him. Some decennia ago they are said to have been distinguished above all other nations of the East for their liberality towards their Doctors, but such times are long past, and the Turk now-a-days either gives no fee at all, or one that is far from liberal. This may be partly due to the poverty which is fast increasing among the middle classes of the Turkish population, who owed their former prosperity to a few branches of trade, which, in consequence of the want of all impulse and the indolence natural to the Turks, is passing into the hands of the more enterprising and industrious Christian population; and their sources of gain are still further diminished by the European import trade. Pashas and the higher Turkish dignitaries, it is true, have no cause to complain of a want of money, on the contrary, many of them have by the most crying extortions accumulated enormous riches; but these persons generally seem to consider the Physician sufficiently honoured if they consult him. Connexions among high dignitaries of the realm are, however, useful to the Doctor none the less, as he may, by the favour of such patients, obtain some other lucrative post, so that his fee is paid him by the Government, instead of by the patient. That many unconscientious persons belonging to the Medical Profession make use of such favour, in order to further their own ambition and intrigues, cannot be surprising to those who have only a slight knowledge of the East.

The Physicians of Constantinople live almost exclusively in the European quarter of Pera, the seat of the European Embassies and the merchants. The population has now been so long accustomed to seek Physicians of eminence only in that part of the town, that the endeavours of some Medical men to settle in other quarters have always failed, as the people consider them, by the mere circumstance of their place of residence, to be inferior to those of Pera. In cases of slight indisposition, an Apothecary is called in, and for a severe disease a Physician, residing in Pera, is consulted; but the ermite of the native parts of the town, who sacrifices all enjoyments of society to his avocation, is never sufficiently rewarded for his silent heroism. Those who are acquainted with the hilly situation of this town, extending on one side to the lake of Marmora, and on the other stretching along both banks of the Thracian Bosphorus towards the Black Sea, and who know the condition of the streets and the imperfect means of communication, will readily believe that Medical practice in Constantinople is exceedingly fatiguing, and the fee is so modest, that the Physician is not at all sufficiently rewarded for his trouble. Distant quarters are visited by the Medical man on horseback, or by water in the fast but dangerous caïques; carriages are of no use here, and the steamers are inconvenient. Even under the most favourable circumstances, the Physician cannot visit more than fifteen patients a-day. The fee for a visit in Pera and its nearest neighbourhood varies from 40 to 60 piastres; in more distant parts from 100 to 300 piastres. Formerly 7 piastres were equivalent to one shilling; but at the present low rate of the Turkish paper-money, the piastre is little more than a penny (8 to 10 piastres = 1s.). During summer, when the more wealthy classes of the population live on different points of the Asiatic coast, the Prince's Islands, and along the Bosphorus, the Physician is continually travelling.

Only a few of the Medical men residing here are specialists; the want chiefly felt, however, is that of good accoucheurs. Dr. Skinas, a Greek, is the only one who makes midwifery his specialty, and has a good reputation as an accoucheur. Dr. Hübsch, a pupil of Sichel's and Jäger's, is clever as an oculist; Dr. Naum, Professor of Ophthalmic Surgery at the Medical School, and pupil of Dr. A. Von Graefe's, of Berlin, is also said to be a clever oculist; but he does not confine himself exclusively to this branch of Surgery. There are no "pure Surgeons" here. C. Caratheódory, Sarell, Marcos Pitzipio, and De Castro, are considered the best operators. I have already mentioned in a former letter that Surgery is almost entirely in the hands of native empiricists; this is very much the fault of the Faculty themselves, as the few accomplished Surgeons who have been here, have not taken the trouble to struggle against the prejudices of the population. Of late, however, some improvement has taken place in this respect.

In conclusion, I may say a few words on Medical practice as it is in the provinces of this Empire. Until now Physicians not belonging to the Army Medical Department have only settled in very few provincial towns, where the practice is, therefore, almost entirely in the hands of native quacks, and as the population does not feel the want of scientifically educated Doctors, those few of the latter who are there, have very little to do. Smyrna alone forms an exception of this rule, as in this, the second capital of the Empire, which is almost entirely inhabited by Christians, and, therefore, called Giaur-Ismir by the Turks, there are many Physicians, who have been educated in Europe, and who need not fear competition on the part of the empiricists so much as is the case here. The fee generally given at Smyrna, is 10 piastres; but, as every Doctor is connected with an Apothecary, by whom all his prescriptions are made up, and with whom he is in intimate relations, part of the gain from the sale of medicines falls to the Doctor's share. In some other provincial towns there are Civil Physicians, appointed by the General Medical Council of Constantinople, who are paid out of the provincial treasury, and obliged to treat patients gratuitously. The salary given to them varies from 1000 to 1500 piastres a month, and, besides, they derive some income from the sale of medicines.

After having thus given you a sketch of the Native Empiricists and European Doctors, I shall in my next letter

take a glance at the Imperial Institution for the Education of Medical Practitioners, or the Medical School of Constantinople.

PRUSSIA.

Königsberg, July 20.

THE MEDICAL FACULTY AND THE JEWS.

Within the last few days a "General Council" of the Professors of our Medical Faculty has been held, to which some special interest was attached. Dr. Samuel, of this town, a Physician of great scientific acquirements, and especially known by his researches on trophic nerves, became a candidate for the place of "Privatdocent" (*Professeur agrêgé* of the French) at this University. "Privatdocenten" are allowed to give lectures, but they receive no salary from the Government, and have no share in the administration of the University. The Medical Faculty at once made a unanimous representation to the effect that Dr. Samuel was a fit and proper person to become a Privatdocent, but the Curator of the University, who is at the same time Oberpräsident of the Province, rejected this on the ground that the applicant was of the Jewish persuasion, and had, therefore, no right to teach at an University consisting entirely of Protestants. An appeal might now have been made to the ministry, but Dr. Samuel did not, perhaps, trust to the much-talked-of liberality of the Cabinet, or he possibly did not intend to beg for what, after having been accepted by the Faculty, was his right. He, therefore, preferred to address a *brochure* to the General Council of Professors, whom he thereby made his attorneys. The contents of this *brochure* have been gathered from dusty old parchments, and give a most interesting insight into the spirit of times long gone by. Three hundred years ago the founder of this University, the Duke Albertus, seems to have had much more enlightened views than can be said of those now in power. The fundamental charter contains the following clause:—"We leave it to our successors, together with the Council of Professors, to change these our statutes according to the requirements of the age."

The question now at issue is, whether the *venia docendi* is to be dependent upon the religious persuasion of the applicant or not. The Professors of our Albertina are divided in their opinions on this subject; but the whole Medical Faculty has again given its vote in accordance with humanity and social progress. Among those who voted against the eligibility of Jews, were, of course, all the Professors of Divinity, the jurists who are frozen up in the rigid forms of law, and—*risum teneatis, amici?*—the present occupier of the Chair of Philosophy, which was once held by Kant and Herbart! We may well say, *Tempora mutantur.* It is supposed that the Herr Geheime Rath (Private Councillor), whose name it is not necessary to draw from its provincial obscurity, will receive as reward for his enlightened vote, the title of "Real" or even "Superior" Private Councillor; or that he may even be decorated with the Order of the Red Eagle of the fourth class, which would, no doubt, satisfy the boldest dreams of his ambition.

Breslau, July 16.

INFLUENZA AND CONTAGIOUS EYE-DISEASES.

Catarrhalic affections of the respiratory organs have been very frequent here of late, and during one month no less than forty-six men in one quarter of our garrison died of pleurisy. The influenza extended even to animals, and in a regiment of cavalry stationed here, among 500 horses, 176 were affected by it, of whom sixteen died. It was remarked that this disease quite spared the artillery, and it, therefore, seems certain that there must have been some endemic causes, which affected the health of the cavalry-horses. The situation of the stables, which are in one of the most exposed and windy parts of the town, and the places where the horses were exercised, no doubt favoured this affection.

Since the commencement of this year, a contagious inflammation of the eyes has also made great ravages amongst the troops stationed here. In a single regiment of infantry, 200 men were attacked, and in a single battalion, which consists of from 400 to 500 men, 115 suffered from it. This disease also appeared in the artillery and camp followers. The military register of disease, gives six different forms of eye diseases, viz., primary granulations, granulative catarrh of the conjunctiva, acute and chronic blennorrhœa, secondary granulations, and, finally, non-contagious diseases. This system seems too complicated; it is difficult to understand how primary granulations are to be distinguished from granulative catarrh of the conjunctiva, unless one took the number of granulations which exist in a given case as the criterion. In one portion of the troops, which consisted of 597 men, there were in January, before the epidemic had reached its height, seventy-two patients suffering from eye diseases, among which only twenty-six cases were of a non-contagious nature; all the others were affected with granulations. In another quarter, among 248 men, there were forty-five cases of eye diseases, of which only nineteen were non-contagious. The men sent to the Hospital from the artillery and camp followers, were mostly such as had been occupied in the stables, so that the supposition of the stable air being detrimental was mooted, especially as many of the men had not been employed about horses before. But as the epidemic made the greatest ravages among foot soldiers, this supposition cannot be sustained. Generally speaking the search after local miasmata has not been very successful. Although the disease may have now and then appeared in rooms which had been affected before, or which were very damp, the contrary was also observed, and the benefit consequent upon a change of air does not prove the existence of a local miasma. If an epidemic breaks out, it is, under any circumstances, advisable to leave the infected neighbourhood; and the barracks here have, therefore, been entirely evacuated for some time past.

In endeavouring to ascertain the causes of such epidemics, the constitutions of the individuals affected should always be considered, as this has often a more important bearing upon the question than telluric effluvia or atmospheric influences. With regard to this point, I may remark, that the affected troops (artillery and camp followers) consist of the refuse of the conscripts generally, and the rudest sort of peasants, men bloated and overfed by dumplings, potatoes, and bad bread. The 50th Regiment of Infantry, which was most considerably affected, is partly taken from a neighbourhood where the people are of a less than average breed,—small men with lax fibres, and prevalent venosity; and partly from the proximity of Breslau, the damp climate of which is unfavourable to a vigorous development of the frame, and which favours catarrhalic affections. Inflammation of the eyes has always been frequent in Silesia; during this Spring the civil population has also suffered much from it. Out of 200 conscripts 20 had to be discharged in consequence of granulations. These were evidently cases of neglected catarrhalic, and not of contagious, inflammation, which is only observed in corps living closely together. Men who have been discharged, scarcely ever carry the contagious matter with them, and thereby propagate it; as, in the first instance, no one is dismissed while in the stage of contagiosity; and secondly, the change of air, especially a stay in the country, exerts a beneficial influence upon the patient. There must be, therefore, something in the general mode of life of the soldiers here, that is especially noxious to the eyes; influences which alter the whole system may affect the eye as organ of secretion, and the decomposition of the blood then centres, as it were, in the eyes. Bad air, which in Foundling Hospitals and Lying-in Institutions produces blenorrhœa neonatorum, has a similar influence in barracks, where the concentration of many men in one room, if ventilation is not properly carried out, is in itself sufficient to render the expired air a sort of contagium. To this is added the super-position of beds, whereby the man in the lower one has, of course, too limited a supply of respirable air; and, finally, indigestible and heavy food—the Commiss-bread of the soldiers, baked of rye bran, which is extremely favourable to a copious development of sulphuretted hydrogen in the lower part of the intestines.

Concerning the treatment of the granulations, lapis medicatus (one-half of which is nitrate of silver, and the other half nitre) was generally employed, and, thanks to the zeal of the Doctors, the curative results were very good. If cauterisation was repeated too often, the irritation increased; it appeared to be better to favour the resolution of the granulations by mild applications, such as fine oil, salt-water, lukewarm fomentations, etc. Even warm cataplasms were beneficial in far advanced cases, in which irritants, such as creosote and sabina, only made the disease worse. If the general health was affected, calomel was also administered.

GENERAL CORRESPONDENCE.

OPIUM IN PUERPERAL CONVULSIONS.

Letter from Mr. Duncan.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your number for June 29, Mr. Witten gives details of a case of puerperal convulsions in which he used opium with marked success. Allow me to mention that I have used it frequently since 1856, and can vouch for its extraordinary power in subduing them. I give it in large doses, or rather in one single large dose of from gtt. lxx. to gtt. xc. of the tincture. In no case has it failed to check the fits; in fact, from the moment it was given, not a single fit supervened in any of the cases. I prefer giving it alone by the mouth. I have given it both when the pupils were contracted and dilated. It acts as a powerful sedative on the heart's action, the pulse falling both in strength and frequency under its power, the patient hitherto so restless with loud stertorous breathing generally falls into a natural sleep in which the breathing becomes quite calm and easy, from which she awakes generally in about eighteen or twenty hours quite well.

In advocating the claims of opium in these cases, I would by no means undervalue the proper use of the other means; but I can safely affirm that even after all other means have been tried and failed, opium may succeed. I attribute its non-popularity in these cases solely to the fact that formerly, when it was given at all, it was in small repeated doses, the effects of which were a keeping up of the excitement instead of subduing it. The same error, I am afraid, was formerly committed in the treatment of delirium tremens, where digitalis in large and heoric doses now is strenuously advocated, but where opium in equally large doses would be as powerful and effective.

I am, &c.

Coatbridge, July 11. James Duncan, L.F.P.S. Glasg.

IRISH HEALTH-RESORTS.

Letter from Mr. Eccles.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have often been at a loss to obtain more than mere guide-book information as to places of resort for invalids, both at home and abroad, that I had not myself visited. Thinking this may not improbably be the case with others, I send you notices of two Irish watering-places, at each of which I have just passed a week's holiday.

Let me premise one opinion I hold,—that any English watering-places afford change of air; but that by crossing to the Continent or Ireland, English invalids obtain more than change of air—change of climate; and I am convinced that this is worth bearing in mind when deciding where to send a patient. Landing at Kingstown from Holyhead in May, I went forthwith to Bray, the now most fashionable resort from Dublin, whence it is distant about twelve miles by rail. A fine sea view, with extensive beach backed by a large plain, semicircular, and stretching away to the Wicklow mountains, which reach the sea at Bray Head, are the natural attractions; whilst Art has provided fine hotels, good lodging-houses, handsome Turkish baths, and great facilities for exploring hence as head-quarters, the proverbially lovely scenery of the county of Wicklow, embracing every beauty of mountain and river, vale and sea: all this, with a fine, bracing sea, renders Bray a most attractive place, either for the invalid or tourist. Its rapid and continuous increase will attest its great repute. Thence I went to Newcastle, in the county of Down, with its miles of splendid sands on the littoral of Dundrum Bay. The Mourne Mountains rise almost sheer from the sea, as the narrow town is built quite on the shore, at the foot of Slieve Donard, which rises 2796 feet above it. Behind the town on the mountain side, is Donard Lodge, with its pine woods, waterfalls, and the extensive grounds, which are thrown open to the public with the greatest liberality by the Countess Annesley. The arbutus, the Portugal, and common laurel are large trees, and fuchsias and rhododendrons are also more trees than shrubs. In the grounds, too, is a fine chalybeate spring, much like that here. Lady Annesley has had it covered with granite as a fountain, with drinking-cups attached; but as it is too far up the mountain for an invalid to walk (a carriage-drive has been made to it), and especially as chalybeate waters generally require to be taken twice a-day, I think, by means of pipes, it should be brought down to the excellent baths in the town, to which a pump-room might easily be added. Very different in character from Wicklow, the mountain and coast scenery about Newcastle is most beautiful, affording endless enjoyment in walks and drives. The view from the Bay, looking over the town and Lodge to the Eagle's Nest and Slieve Donard—the Mourne Mountains extending far away inland,—reminded me much of the approach to Genoa from the sea. I do not know a place with more natural capability for a marine watering-place than Newcastle; and from our Northern counties it is not difficult of access by way of Fleetwood and Belfast, the railway whence to Downpatrick brings you within a few miles of the place. The air is clear, pure, and bracing, whether from the mountains or the sea; the rock a close, grey granite, succeeded by grey-wacke schists; and there are good houses, and an excellent hotel.

I have travelled in many countries in search of health for others, and I can confidently recommend Newcastle and Bray to my professional brethren, who, in these days of tourists' tickets, can easily run over and see for themselves.

I am, &c.

Tonbridge Wells, June 27. Alfred Eccles.

ARSENIC IN INTERMITTENTS.

Letter from Assistant-Surgeon J. Brake.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a recent number of the *Medical Times and Gazette* you published some observations made by Assistant-Surgeon Chapple upon the use of arsenic in large doses in the treatment of intermittent fevers in Western India.

No such reports have been called for in the Bengal Presidency within the past six years; but as I have employed arsenic regularly during that period in the ordinary doses of five minims of the officinal preparation, I can speak in the highest terms of its efficiency.

My Indian experience has been gained chiefly in Lahore, Delhi, Cawnpore, Bundelcund jungles, and Saugor—all but the last-named place notorious for miasmatic diseases. At Lahore, in 1856, more than 600 out of 1000 men passed through my Hospital in one month.

My patients have usually been numerous and mixed; that is to say, both European and Native, the latter being Sikh and Punjaubees, meat-eaters and spirit-drinkers, with constitutions greatly resembling those of Europeans.

In all cases my experience of the effects of arsenic in small doses has been the same, and I employ it for myself and my own family. In quotidian fevers it does not fail to effect a cure once in fifty times, the usual time of taking it being five or six days, as I always continue its exhibition at least two days after the last paroxysm, and the cases very seldom relapse. In tertian and quotidian fevers the treatment by arsenic alone is more protracted, and though these may be cured by it, I usually combine with it quinine in doses of two grains three times a-day, until one or two paroxysms have been warded off, when the arsenic alone is continued for a few days.

Perceptible enlargement of the spleen scarcely ever occurs during the treatment; but, as might be expected, bilious derangement is a common accompaniment of intermittent fever, and I never attempt to cure a case without one or perhaps two mild mercurial aperient doses being given at the commencement of the treatment.

I subjoin the statistics of one regiment of 550 men, for the year 1860, stationed at Saugor, considered a healthy cantonment:—The admissions were 752,—including quotidian fever, 293; tertian fever, 66; quartan fever, 14; total, 373. The deaths were two, viz., one from cancer, one from jungle fever (brought in moribund).

I am, &c.

John Brake, Assist.-Surg.
2nd Sikh Cavalry Staff Surgeon.

Saugor, C. I., June 18.

CARBUNCLE—TREATMENT WITHOUT INCISION.

LETTER FROM DR. LEMON.

[To the Editor of the Medical Times and Gazette.]

SIR,—The treatment of carbuncles seems to be at the present time especially worthy of observation, since they belong to a group of diseases, such as erysipelas, diffuse inflammation of the cellular tissue and furunculi, all indicative of a condition of constitutional debility, and which are said to be of much more frequent occurrence within the last few years than formerly.

In most of the works on Surgery at present in the hands of Students, the practice of making free incisions is recommended; thus Mr. Syme says, "The treatment of all degrees of this affection should be conducted on the same principles. The first of these is to relieve tension, bleed from the part, and afford free vent to the confined matter, by making a free crucial incision completely through the integuments to the full extent of the disease." Pirrie, in the recent edition of his work, says, "The objects to be fulfilled by local treatment are two,—to promote suppuration and to facilitate the discharge of sloughs. For the first end we apply poultices or warm fomentations, and for the second, it is the general rule to make a crucial incision into the swelling, and afterwards to expedite the separation and discharge of sloughs." Erichsen also, in the recent edition of his work, says, "The local treatment consists in incising the carbuncle freely and deeply in a crucial manner."

It is because of this uniformity in the recommendation of incisions that I have thought a report of the following cases, which were lately under the care of Mr. Lawrence in St. Bartholomew's Hospital, in the same ward and at the same time, and were treated without incisions, would not be uninteresting, for I cannot imagine it could be a matter of indifference, whether or not such a line of treatment had been adopted, in a case like the one first given, where free crucial incisions, completely through the integuments to the full extent of the disease, would have amounted to seventeen inches of cutting through greatly congested textures, which would necessarily have been accompanied with dangerous hæmorrhage and severe shock to an already depressed system, and together may have seriously interfered with the powers of repair, upon which the demand would be great to build up so large a breach.

Case 1.—T. C., aged 51, admitted into Henry the Eighth Ward, December 6, 1860, with a large, hard, tense, congested, painful swelling, with suppurating points, and measuring nine inches by eight, occupying the upper part of his back. The swelling commenced three weeks before, and gradually assumed its present dimensions. He has suffered much pain and loss of rest, and is in a very low condition. Vomits frequently, and has a constant feeling of sickness, so that he cannot take animal food. Ordered: broth diet, six ounces of wine, one pint of porter daily. Linseed poultices locally. December 8. — Stomach improved, carbuncle softening. Ordered: meat and jelly, wine and porter as before, and a draught with carbonate of ammonia gr. v. in decoction, and tinct. cinchonæ every six hours. 10th.—Mortification of the integument and subjacent tissue in one mass, measuring seven inches across, and six in the vertical direction. General health very low. Ordered: yeast poultices, as a local stimulant, six ounces of brandy substituted for the wine; liquor cinchonæ ʒss. every six hours. 15th.—Profuse suppuration, slough freely separating; health still low, and irritable. To continue the remedies, also to take pulv. ipecac. comp. gr. x. every night. To use plain linseed poultices. 29th.—The whole skin and cellular tissue have separated, laying quite bare the muscles to the extent given above; but wound looking clean and healthy. January 16.—Wound healthy, granulating rapidly, health much improved; but there is a little cough for which he was ordered morph. acet. gr. $\frac{1}{6}$, every night, having discontinued the Dover's powder. 30th.—Wound granulating rapidly, cough a little troublesome. To take inf. cascarillæ, tinct. scillæ, and æth. chloric three times a-day. February 28.—Left the Hospital perfectly recovered in appetite, health, and strength, having only a superficial wound, about one inch in diameter, which healed in a few days afterwards.

Case 2.—J. G., aged 66, admitted to Henry Ward, October 11th, 1860, with a hard, painful, imperfectly suppurating carbuncle, about four inches in diameter, on the back of his neck, close to the skull. Its raised margin of incompressible hardness was advancing over the external transverse ridge of the occiput. Ordered meat diet, two pints of porter daily, liq. cinchonæ ʒss. three times a-day. Yeast poultices to the carbuncle. 12th.—To dress the central part of the sore with cerat. resinæ, and cover the whole with a poultice. To add two ounces of gin daily to his diet. 15th.—To continue as before. 19th.—To continue his diet as before. To take pil. saponis cum opio, gr. v. omni nocte; haust cascarillæ cum scilla. ter die, and to apply a mustard poultice to his side, in which he complains of pain with a cough. Ulcer to be dressed with balsam of Peru. 20th.—Dress ulcer with lotio. arg. nit. gr. iv. to the ʒj. 23rd.—To use the lotion gr. vj. to the ʒj. 27th.—Discharged cured.

The only thing worthy of note in this case was the situation of the carbuncle, and that it was accompanied with much pain and tension; yet that Mr. Lawrence did not cut it, and that it did very well under the influence of good diet and moderate stimulants.

Case 3.—W. C., aged 78, admitted December 10, 1860, with a carbuncle similar in size and situation to that of J. G. His treatment consisted of meat diet, one pint of porter, six ounces of wine daily. Liq. cinchonæ, ʒj. ter die. Yeast, and afterwards linseed poultices, and lastly cerat. resinæ. He was discharged quite cured on January 11, 1861.

I think the above will, at least, show that incisions are in some cases unnecessary, in others may be possibly injurious, and it will doubtless contribute very much to compensate for the space taken up in your columns by this report if I conclude it by quoting the observations made by Mr. Lawrence when the first-mentioned case, that of T. C. was admitted. He stated that although the local mischief had reached an extent altogether unusual and the debility was alarming, he considered the danger of the disease to be less than that of the treatment by incisions. He thought that the latter course would be immediately fatal. He added that although carbuncles continued to be prevalent as they had been for some years, he had not cut one for a long period—not meaning to express entire disapproval of the practice, which he considered to be necessary in some cases. I am, &c.

H. M. LEMON, M.D., Dresser.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 25, 1861.

DR. BABINGTON, President, in the Chair.

A Paper, by Mr. J. TURNER, was read

ON ARSENIOUS ACID, IN LARGE DOSES, IN FEVER, A SUBSTITUTE FOR QUININE.

The Author has employed arsenious acid for twenty years in the treatment of intermittent fevers, and on account of the great drain upon the cinchona tree, its failure in India, and his strong opinion as to the equal, if not greater, value of arsenious acid in the above-named diseases, he now brings the results of his experience before the Profession. He considers the fears of an inconvenience or danger arising from the remedy as much exaggerated, and instances the case of a child of nine months to whom he gave liq. potassæ arsenitis ♏xx within ten hours, repeating the dose on the following day, with the only effect of curing an obstinate quotidian intermittent. Mr. Turner's success was so marked that in 1860 the Director-General stated that Mr. Turner should be thanked for "drawing attention to his successful treatment of intermittent fevers by large doses of arsenic, and steps should be taken by circular to urge an extended trial of this remedy, and reports requested." The course usually adopted by the Author was to give the arseniate of potash as in the following prescription:—℞ Liq. potass. arsen., tr. cardam. co., ana ʒss; mucilag. acac., ʒiij; mist. camph. vel aquæ, ʒss. M. To be given every second hour four or five times,

the last to anticipate the expected paroxysm at least two hours.

Mr. Edward Charles Hulme gave particulars of a

CASE OF IRIDEREMIA TOTALIS.

John T., aged 22, a pallid, but otherwise healthy man' for some years a sailor, and now a fireman on the Great Northern Railway, was brought by his wife to the Hospital for my opinion as to the state of his eyes on May 31, 1861. The cornæ were clear, of normal size and shape ; the scleroticæ white and healthy ; the lenses, when reflected lights were thrown on them, showed deep-seated opacities ; the globes were unsteady, always in motion ; palpation healthy ; no photophobia ; no ptosis of either lid ; under the ophthalmoscope no vestige of iris was to be seen. The opacities were chiefly capsular on the posterior part of both lenses, with slight central opacities on their anterior surfaces, not extending deeply into the structure of the lenses ; the shaded edges of both lenses were clearly to be traced, leaving a narrow ring of red, illuminated fundus all around. The optic disc and fundi of both eyes appeared healthy ; he could see to read No. 6 (Jæger's scales) well at about six inches. As a sailor, he regularly took his duty of steering by compass, both by night and day. The sight was not improved by convex or concave glasses, or by the use of an artificial diaphragm. Objects were best seen in a subdued light. There was no imperfection in any of his family. The state was congenital ; his sight does not get worse.

The case was shown to the Fellows.

Mr. Daniel Meadows, of Lowestoft, sent particulars of a

CASE OF TETANUS OF FOURTEEN MONTHS' DURATION.

William L., aged 36, a strong fisherman, but with hæmorrhagic tendency, early in December, 1859, had a cough of unusual violence. An act of coughing suddenly ceased, and the head was at the same time spasmodically thrown backwards, with great pain in the neck. Complete tetanus gradually developed itself in every form, and lasted with such intermissions as were evidently the effect of remedies, till the middle of January, 1861, nearly fourteen months. Treatment of every kind was tried. The prolongation of life seemed to be due to the free breathing of chloroform and the constant use of morphia, both by the mouth and by injection under the skin. A small clot was found on the front of the cervical part of the spinal cord.

EPIDEMIOLOGICAL SOCIETY.

Monday, July 1, 1861.

Dr. Babington, President, in the Chair.

A paper, by Dr. Duncan, of Liverpool, was read by Dr. McWilliam, on

THE RECENT INTRODUCTION OF FEVER INTO LIVERPOOL BY THE CREW OF THE EGYPTIAN VESSEL THE "SCHEAH GEHAED."

This vessel left Alexandria in November, 1860, and arrived at Liverpool on February 16, 1861. The crew, in number 476, consisted chiefly of Arabs ; the captain was the only European on board. The voyage was very tedious, and the weather cold and stormy. The men, who were unaccustomed to the cold of a northern climate, crowded below for warmth and shelter. Many suffered from sea sickness, and the discharges from the stomach and bowels were allowed to accumulate in all parts of the ship, which was so disgustingly filthy, that on its arrival, it had to be sunk in the graving-yard. The space allotted to the crew was quite insufficient, even under ordinary circumstances, and no attempt was made at ventilation, while the persons and clothes of the crew were filthy in the extreme and swarming with vermin. During the entire voyage their clothes were not washed or changed. The captain had been instructed to procure fresh clothing for them at Malta, but in his anxiety to make a quick passage, he had neglected to do so. The pilot, who went on board, stated that when any of the crew passed him on deck, he felt an "awful smell." In addition to the over-crowding and personal filth, the men suffered from over-fatigue, consequent on the boisterous weather, and from great mental depression, while their rations were much below the proper standard, as regards quantity. During the three months that the crew remained at Liverpool, 127 were on the sick list, and eleven died. The diseases from which they suffered were dysentery, diarrhœa, pulmonary affections, and the effects of exposure to cold. There was no infectious disease on board during the voyage, and not one of the crew had typhus, either on the arrival of the ship, or at any time during their stay in Liverpool. The eleven fatal cases were all dysentery. It was shown, however, that the ship and crew became foci for the communication of a fever, which presented all the characters of true exanthematous typhus. In the first place, three persons contracted typhus about a week after visiting the ship. Two of the three died. Secondly, during four days of the week, immediately after the arrival of the vessel, 340 of the crew were sent, in detachments of eighty, to the public baths in Paul-street. All were in good health ; all walked from the vessel to the baths (upwards of a mile), and all, with one exception, walked back. In the exceptional case, the man was weak from starvation and was sent back in a car ; next day he returned to the baths on foot, much better. Of the six attendants at the baths, three were seized with typhus, within twelve days of the last visit of the crew, and 1 died. The attendants had remarked on the offensive smell which the men from the ship had emitted and left behind them. On each occasion, the 80 men had remained at the bath buildings for three hours, and the attendants had been in constant communication with them. Thirdly : On February 27, 32 of the sick were sent from the ship to the Southern Hospital. The men were suffering from dysentery, chest affections, and the effects of exposure to cold, but not one of them had typhus. There was no case of typhus in the Hospital at the time, and, moreover, Liverpool was unusually free from fever. Out of a population of 40,000 immediately around the Southern Hospital, only 1 death from fever had occurred during the previous six months, and the nature of the fever in that case was not stated. But, a week after the arrival of the Egyptians, the House-Surgeon was attacked by typhus, and during the month of March, 7 of the other attendants and 17 of the other patients (who did not come from the ship) were also seized with the same fever. Of the 25 cases which originated at the Hospital 5 proved fatal. Thus, in all 31 persons contracted fever from the ship or crew, of whom 8 died. Three explanations of the outbreak of fever on shore according to Dr. Duncan, suggested themselves. The first is that the Egyptians themselves had typhus, but this is entirely disproved by the evidence of Mr. Irvine and Dr. Cameron. The House-Surgeon at the Southern Hospital now thinks that the dysentery under which the Egyptians laboured was typhus. But if he had thought so at the time, it would have been his duty not to have admitted the cases into the Hospital. His argument simply amounts to this, that because the Egyptians imparted the fever, they must have suffered from it themselves. Moreover, the Egyptians who went to the baths had neither fever nor dysentery. Secondly, was the fever generated by overcrowding in the Southern Hospital ? Although the numbers admitted into the Hospital certainly exceeded the proper limits, the ventilation was good, and the overcrowding was insufficient to generate fever, each patient having had from 730 to 790 cubic feet of space. Moreover, overcrowding at the Hospital fails to account for the fever which attacked the attendants at the baths, and the persons who visited the ship. The only explanation consistent with the facts of the case is, that the fever-poison was generated on board the ship, that it clung to the filthy persons and clothing of the crew, and that these men, not singly, but in masses in a confined space, communicated the fever to others. Dr. Duncan then proceeded to mention an opinion which the circumstances of the case had suggested to Dr. Cameron, of Liverpool, viz., that the same poison which causes dysentery in the black, may induce typhus in the white man. Dr. Duncan thinks that this doctrine is worthy of consideration. He appeals to the contagious character of dysentery in the tropics, and quotes Dr. Copland and Sir Gilbert Blane to show that typhus and dysentery sometimes appear to be vicarious, dysentery in the black races taking the place of typhus in the white.

Dr. Copland remarked that after the great war consequent upon the Revolution in France, in many of the Continental towns there co-existed a prevalence of typhus amongst the

inhabitants and of dysentery amongst the troops. He had seen dysentery and small-pox prevailing at the same time in a slave ship; and as he considered that effluvia from an accumulation of dysenteric negroes might impart fever to Europeans, so the Arabs on board the Egyptian frigate at Liverpool afflicted with dysentery may have propagated fever to the inhabitants of that port. While on this subject he might be permitted to allude to prophylactic measures, which in his experience had been successfully adopted against fever in warm climates. When the late Mr. Bullock went to Mexico, about forty years ago, he took by Dr. Copland's advice bark and Cayenne pepper in wine, and he escaped fever in that country, so notoriously fertile of the "vomito." And when Dr. Stanger accompanied the Niger Expedition in the capacity of geologist, Dr. Copland recommended him to take quinine, Cayenne pepper, and camphor daily. This he did, and he was one of the few of the Expedition that were not attacked with fever.

Dr. Murchison observed, that Dr. Duncan's communication was a most important contribution to the etiology of fever. The three principal points of interest in the paper were:—1. The spontaneous generation of the poison of typhus fever on board the ship; 2. The communication of this poison by the crew to persons on shore, although none of the former had fever themselves; and 3. The relation supposed to exist between the poison of typhus and that of dysentery. First, as regards the spontaneous generation of the poison, it was to be remarked that the circumstances were precisely those which are known to generate the poison of true typhus in other localities. Typhus had been named at different times, Hospital Fever, Jail Fever, Army or Military Fever, and Ship Fever; but, whatever was the locality in which the fever appeared for the first time, the circumstances had always been the same,—overcrowding and personal filth, more especially when confined, as in the instance under discussion, with deficient food, over-fatigue, and mental depression. Those who were familiar with the writings of the Medical men of last century, would recal many similar histories to the one so ably recorded by Dr. Duncan. Fortunately, examples of the development of the typhus poison on board ship are now so rare, that many doubt the possibility of such an occurrence. But in former days, when less attention was paid to hygienic arrangements, they were very common, and the circumstances had invariably been the same as those to which the crew of the *Scheah Gehaed* had been subjected. Lind, although he believed that typhus could, in most cases, be traced to contagion, was forced to allow that some instances would not admit of such an explanation. The outbreak in these cases commenced in the small vessels of the fleet, during long voyages and stormy weather, when the men were, for the most part, shut down below and the hatches kept closed. Sir Gilbert Blane had observed that "the infectious fever (typhus) is not always imported from without, but may be originally and spontaneously generated on board. The causes of this are want of personal cleanliness and also confinement and crowding in close apartments." The outbreaks of typhus, which occurred on board the prison ships at Plymouth in 1810, and in the hulks at Toulon in 1829, were attributable to the same causes. In reference to the second point, Dr. Murchison mentioned several instances to prove that the poison of typhus can be propagated by fomites, and he alluded more particularly to the frequency with which persons who washed the bedding and clothes of typhus patients had contracted the disease. It was well known, he said, that persons might convey the poison of typhus to others, without taking it themselves. Moreover, the histories of the various "black assives," and other similar instances which might be adduced, showed that the typhus poison might be generated by overcrowding of human beings, that this poison might cling to their clothes, and communicate the disease to others, without the persons who had been overcrowded suffering from it. Whether this was accounted for by the immunity acquired by habit, he would not pretend to say. Lastly, as to the connexion between dysentery and typhus, although certain of the circumstances which favoured the generation of the one disease, might contribute to the development of the other, he was not prepared to admit, that the same poison could generate dysentery in the Arab, and typhus in the European. Although dysentery was believed to be communicable in the Tropics, the chief causes of its origin and propagation were very different from those of typhus. There were good grounds for the opinion, that the chief, if not the only manner, in which dysentery was communicable, was by the stools, a remark which could not apply to typhus. A careful study of the great epidemics of fever in Ireland and in besieged cities, taught that typhus and dysentery often prevailed together, under the same circumstances, and among persons of the same race. These facts rendered it probable that some of the circumstances favourable to the generation of the two diseases were similar, but were opposed to the idea of the two poisons being identical, the different effects depending merely upon race.

Dr. McWilliam regretted that at that late hour he could not enter into the case of the *Scheah Gehaed* at Liverpool, nor follow up the events among her crew after they were transferred to the *Voyageur de la Mer*, and conveyed in that vessel to Alexandria. With regard to the question raised by Dr. Cameron as to the capability of the poison that induced dysentery in the Arab to cause typhus in the European, it was, as remarked by Dr. Duncan, well worthy of consideration. In warm climates especially there seemed fair ground for believing that the same poison, or, at all events, that the same conditions of climate, soil, season, and meteorological phenomena may cause either fever in some form or dysentery, for both are frequently found to prevail at the same time, and under circumstances in every way similar. In Dr. Smart's valuable paper on China, read in the course of the present Session, the affinity of remittent fever to dysentery is discussed, and the view that these diseases may have a common origin is favoured. Dr. Smart considers that in China dysentery was quite as much a disease of periodic type as remittent fever, and that "of whatever type the dysentery may be, whether acute or chronic, sthenic or adynamic, there is in it an increased or paroxysmal excretory effort between midnight and dawn," the same period at which in remittent fever we look for the chief remission with paroxysmal excretion from the skin. He regards the act of purging as the evacuation of increased intestinal follicular secretion, and as the analogue of the action of the skin during the sweating stage of fever. Sir John Pringle, in speaking of the diseases of the British army in the Low Countries, says that dysentery appears in the same seasons with fever, and that both seem to be particular determinations of the vitiated humours, which either give rise to a flux, or, if retained in the blood, produce fever in the intermitting, remitting, or continued form. It was right, he should add, that in the fever of the Niger, dysentery occurred only as a sequela of the primary disease. Dr. McWilliam concurred with Dr. Murchison in the high opinion he had expressed of Dr. Duncan's paper.

HOSPITAL FOR CHILDREN AT BIRMINGHAM.

(*From the Birmingham Daily Post.*)

The facts which prove the want in Birmingham of a Hospital especially devoted to the treatment of poor children, have already been stated in considerable detail. It is known to those who have attended to the statements made public, first, that existing institutions, from whatever cause, embrace but few children in the scope of their operation; secondly, that the rate of mortality among children is far higher than natural causes would account for; and thirdly, that several other towns, influenced by the weight of these two considerations, have already provided separate establishments for the treatment of children. It is consequently proposed that Birmingham also should institute a charity of this description. The advantages to be expected from it are twofold. We may confidently hope that by such agency the sickness and mortality among children will be favourably affected in a direct manner, and that, as an indirect advantage from special attention being given to them, infantile diseases will become better known, and therefore more susceptible of efficient treatment. We have not mistaken the public spirit of Birmingham in assuming from the first mention of the subject that, for objects such as these, the requisite means would be freely offered. At a meeting held on Friday for considering the question, there was an attendance of many influential gentlemen, every one of whom manifested a readiness to give the

proposed institution his support. Two Medical Practitioners entered into detailed explanations of the causes which rendered such a charity necessary, and of the machinery by which it would be worked, while clergymen and laymen all had weighty reasons, derived from their own experience, to show that we have waited for it too long already. There was no shadow of opposition to either of the resolutions proposed. The document put forward by the Committee of Queen's Hospital, which is to the effect that their institution can furnish the accommodation sick children require, and that separate institutions for the cure of particular cases are injurious to the cause of Medical science, was universally pronounced a mistake in both respects. It was demonstrated by a mass of facts adduced by Dr. Heslop, that in all establishments of a miscellaneous nature the resources are almost exclusively expended on adults, while, as to Medical Science, it was shown that on that very ground, if on no other, an institution for the study and treatment of infantile disorders was desirable. The committee of Queen's Hospital have re-published some statements in which eminent practitioners of London dissuade the public from encouraging the growth of small establishments for the cure of special complaints, as being likely to restrict the field of observation which should be open to students in the practice of the large Hospitals. But the present undertaking does not belong to that list. The large Hospitals may also be said to contain no instances of infantile diseases except those of a surgical nature, which the proposed institution would not admit. There is no sort of rivalry, therefore, between a Children's Hospital and any other that is now in existence. Indeed, Sir Charles Locock, who is one of the Physicians quoted by the Queen's Hospital Committee, strongly recommends the establishment of Infirmaries for Children. Facts bearing on the question tell so uniformly in one direction, that it does not admit of argument. Everything that has been or can be said, goes to show that the projected Hospital is wanted. We only have to ascertain whether it can be supplied, and that is a point on which the public must pronounce. Everything is settled but the endowment. As there is no intention of making an extravagant beginning, a moderate amount of funds will set the institution afloat. More can be waited for until it has proved its usefulness, and thereby attracted general sympathy, which it will be certain to do. No estimate of the amount required in the first instance has yet been made; but it no doubt comes within the margin of what the influence of Friday's meeting will in a short time produce. The task of raising what funds are immediately needful may be safely left to the mass of benevolent people who are ever ready to bear their part in a good work. There are so many of that class among the inhabitants of Birmingham that we do not entertain any apprehension of difficulty in this important respect.

Among the facts mentioned by Dr. Heslop on Friday, there was one group of especial interest in connexion with the projected Hospital. They showed that the rate of mortality among children, so high everywhere, is much higher in some places than in others. Why is this? At present there is no means of answering the question; but when a particular study has been given to the subject, and exact statistics have been acquired in various towns, as will result from institutions such as the one now proposed, we may expect the cause to be fully explained, and it is no unreasonable hope that we shall at the same time obtain information of infinite value towards the prevention as well as cure of diseases to which the mortality is ascribable. The reconcilement of these mysterious differences will necessarily lead to most instructive disclosures respecting the circumstances against which human life has to contend in its earlier stages. This will be one of the first-fruits of Children's Hospitals, and it will be in itself an ample return for the expense and pains bestowed upon their institution.

GERMAN SCIENTIFIC CONGRESS.—It may interest some of our readers to be made aware that the next (the thirty-sixth) Congress of German Naturalists and Physicians will be held at Spires from the 17th to the 24th of September. The Directors of the Congress, Dr. Heine and Professor Keller, both of Spires, beg those gentlemen who intend to be present, to apprise them a fortnight before, in order that lodgings may be secured.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (a).—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted Members of the College, at Meetings of the Court of Examiners on July 31st, and August 1st and 2nd:—

Armstrong, George William, Duke-street, St. James's
Autey, William, Leeds
Best, Palemon, L.S.A., St. Ive's, Cornwall
Benson, John Stafford, New Brunswick
Birch, George, London
Blake, Joseph Nicholson, Taunton, Somerset
Bothwell, George Granville, L.A.H.T. Dungannon, Ireland
Bright, James Albert, Cambridge-square
Burrell, Lionel, Westley, Bury St. Edmund's
Clapp, William Prideaux, Plymouth
Collard, James, Bishopwearmouth
Cook, John, Warwick-street, Regent-street
Corbett, Thomas, Stourbridge, Worcestershire
Davies, William Thomas, York Town, Surrey
Douglas, George, Painshaw, near Newcastle
Dodd, Edward, North Stoke, Oxfordshire
D'Uminy, Benjamin François, Cape of Good Hope
Eade, Charles Hugh, Swansea
Fisher, Stephen Winter, Bristol
Foster, John Edwin, Harrowgate
Fowler, Charles Henry, Middlesex Hospital
Galton, John Henry, Brixton
Garney, William, Bungay, Suffolk
Glover, William James Schoedde, Plymouth
Grimmer, William, Cape of Good Hope
Harper, Joseph, Great Torrington, Devonshire
Hine, William Conway, Thickthorn, Ilminster
Howarth, George, Southport
Holman, Henry, Crediton, Devon
Hursley, John, London
Jenkyns, Charles, Tuckingmill, Cornwall
Jones, William Owen, Bala, North Wales
Kelly, Patrick Joseph, M.D., Jamaica
La Trobe, J. Frederick Scott, Bedford
Laidlaw, William, Newcastle-on-Tyne
Leyland, Luke Swallow, Cape Coast
Lockwood, William, Holmfirth, Yorkshire
Maling, Edwin Allan, Sunderland
Maurice, Benjamin, Redlands, near Bristol
Markby, Thomas, Chatteris, Cambridgeshire
Morrish, Thomas Fox, L.S.A., Ledbury, Herefordshire
Moore, Henry, Ashover, Derbyshire
Nesbitt, Francis Frederick Charles, Nassau-street
Nicholson, Theophilus George Husband, Manchester
Risdon, Robert, Arabella-row, Pimlico
Rogers, George Henry, Taunton, Somersetshire
Smith, William John, Westheath, near Basingstoke
Smith, William Towers, Edinburgh
Spurgin, Frederick William, Stratford-St.-Mary, Suffolk
Stevenson, William, Hull-bridge, Beverley, Yorkshire
Sullivan, John, Brompton
Swinson, Thomas Spilsbury, Leamington
Thursfield, William Nealor, Barrow, Shropshire
Turner, William, Edinburgh
Warr, Francis, Theberton-street, Islington
West, John Thomas Henry, Old Broad-street, City
Williams, William Morgan, Pwllheli, North Wales
Yates, James, Oldham.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, August 1, 1861:—

Callaway, Edward, Canterbury
Coathupe, Charles, Clifton
Croucher, Henry, Bexley
Grenfell, Henry, St. Just, Cornwall
Marsh, Frederick Howard, Brome, Suffolk
Lonsdey, Oded, Hampstead Norris, Newbury, Berks
Newby, Thomas, Great Grimsby
Roberts, Frederick Thomas, Carmarthen
Wilson, Henry Octavious, Bridge-street, Bristol.

The following gentlemen also on the same day passed their First Examination:—

Langford, Charles Phineas, Great Portland-street
Ludlow, Ebenezer, St. Bartholomew's
Southam, George Thomas Mitchell, Peterborough.

APPOINTMENTS.

BATE.—Mr. Frederick Henry Bate has been appointed Poor-law Medical Officer for District No. 3, of the Ware Union, Herts, vacant by the resignation of William John Bowden, M.R.C.S. Eng., L.S.A. Lond.

BROCK.—Mr. John Brock, Member of the College of Dentists, has been appointed Dentist to the Westminster General Dispensary.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

BROMLEY.—Mr. Charles Bromley, L.D.S. of the Royal College of Surgeons Eng., has been elected Dentist to the Royal South Hants Infirmary at Southampton.

LISTER.—Joseph Lister, M.B. Lond., F.R.C.S. Eng., F.R.C.S. Edin., F.F.P.S. Glasg. Professor of Surgery in the College of the University of Glasgow, has been elected to the vacant Surgeonship in the College.

MACAULAY.—Thomas Macaulay, of Kibworth, M.R.C.S. Eng., L.S.A. Lond., has been elected Surgeon for the Kibworth District of Market Harborough Union, Leicestershire.

MCCARTHY.—Mr. Edward McCarthy has been elected to the office of Resident Medical Officer at the Dispensary, Norwich.

MORRIS.—Mr. William Morris, of Petworth, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer for the 4th, or Lodsworth District, in the Midhurst Union, Sussex, in succession to Dr. Turner, whose term of office has expired.

PAINE.—William Henry Paine, of Stroud, Gloucestershire, M.D. King's College, Aberdeen, M.R.C.P. Lond., M.R.C.S. Eng., L.S.A. Lond., has been unanimously elected President of the Gloucestershire Medical Association for the ensuing year.

DEATHS.

CASSON.—August 4, suddenly, Edward Casson, M.R.C.S. Eng., Medical Superintendent of the Norfolk County Lunatic Asylum, Thorpe, near Norwich, aged 33.

CURRIE.—June 15, at Agra, of cholera, caught while performing the extra duties of the gratuitous office he had accepted of Inspector of Famine Kitchens situate in various parts of the Agra District, James Allan Currie, M.D., A.M., Superintendent of Vaccination for the District of Agra, and Lecturer on Surgery in the Thomason College, Agra, aged 33.

ERSKINE.—July 30, at Ayr, John Blane Erskine, Student of Medicine.

HOWE.—July 6, John Howe, of Wolverhampton, Surgeon, retired.

KENWRICK.—July 21, George Theophilus Kenwrick, of Hales Owen, Worcestershire, at an advanced age, having been in practice upwards of half a century.

KNOWLES.—Recently, George Stevenson Knowles, late of Wolverhampton, Staffordshire (son of Sheridan Knowles, the celebrated dramatist), M.D. Univ. Edin., aged about 40.

MANLEY.—July 25, suddenly, Robert Hall Manley, of the Commercial-road, Old Kent-road, formerly Surgeon in the East India Company's service, aged 58.

PATON.—May 6, on board the *John Peile*, while on the voyage from Valparaiso to England, James Paton (son of the late Wm. Paton, Esq., of Ramsay, Isle of Man,), aged 41.

SAUNDERS.—July 31, at Cambusbarron, near Stirling, N.B., John Saunders, late of Perth, Medical Student, aged 31.

SHAW.—June 10, at Ballynahinch, Hugh Shaw, late of Saintfield, Co. Down, aged 27.

SMYTH.—June 14, James Douglass Smyth, of Claudy, Londonderry, Co. Down, M.R.C.S. Eng., L.M. Edin., aged 50.

STUART.—July 20, at Haugh, Inveravon, Scotland, Peter Stuart, Student of Medicine in the University of Aberdeen, aged 21.

TAYLOR.—June 7, William Taylor, of Articlave, Coleraine, Co. Londonderry, M.D. Univ. Edin, L.R.C.S. and L.M. Edin., aged 29.

NEW STATUE TO LARREY.—By a recent decree the Emperor has authorised the erection of a statue to Baron Larrey at Tarbes, the chief town of the Department in which he was born.

MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.—At a Meeting of the Board held on Wednesday, the 7th inst., Rawdon Macnamara, F.R.C.S.I., was elected one of the Surgeons to the Hospital, in the room of the late Mr. Rynd. By a singular coincidence, Mr. Rynd succeeded Mr. Macnamara's father in the same office, and in like manner the late Dr. Williams succeeded the father, and was succeeded by the son in the Chair of Materia Medica in the Royal College of Surgeons in Ireland.

ALLEGED SIMULATED CHROMHIDROSIS.—An instance of the dark discoloration of the lower eyelids was published in 1854 in the Memoirs of the Paris Academy of Medicine, and since then Dr. Neligan has given a good description of the affection, together with an illustration, in vol. xix. of the *Dublin Quarterly*. The Academy was somewhat startled recently by a communication of M. Méricourt, of Brest, in which he detailed no less than nineteen cases of this supposed rare affection, met with in the single town of Brest, all occurring in females. He regards it as due to the exhalation of the colouring matter of the blood, and proposes to replace the term *chromhidrosis* by *chromocrinie*. The Academy showed its sense of the value of the communication by declining to allow its publication in the "Memoirs," although M. Gibert, the reporter, recommended such publication. M. Méricourt forwarded to M. Robin some of the colouring matter which he had collected from the eyelids of one of the individuals; and this eminent microscopist pronounced it as not consisting of any artificial colouring substance, and as intimately resembling the colouring matter found in blue urine. A young lady, however, sent to Paris by M. Méricourt, as furnishing a fine example of the affection, was submitted to a rigorous examination by a committee of the Hospital Medical Society, and completely broke down under it, no reproduction of colour taking place after cleansing the eyelids. This makes the fourth instance of persons ceasing to manifest in Paris a coloration said to be present while they were at Brest. M. Behier, the reporter, entered into a long account of the various pigments which may have been employed in simulating this condition. M. Dechambre also described some experiments showing how simulation may be easily affected.—*Gazette Hebdomadaire*, Nos. 28 and 29.

UNIVERSITY COLLEGE, LONDON.—The result of the Class Examinations at the close of the summer term of the Faculty of Medicine was ascertained at a meeting of the Professors and Students, at which Professor Erichsen, Dean, presided, on Friday last, and reported to the Council at their Session on the following day, when prizes and certificates were awarded as follows:—Practical Chemistry—Gold medal, William M. Rogers, of the Mauritius; certificates, 2. William Spooner, of Southampton; 3. George W. Knox, of London; 4. Julius L. Levy, of London. Materia Medica and Therapeutics—Gold medal, Thomas Bailey, of London; silver medals and first certificates, equal, William Gill, of Truro; John Hackney, of London; certificates, 4. John B. Grewcock, of Falkingham, Lincolnshire; 5. Ebenezer Diver, of London. Pathological Anatomy—Gold medal, J. Talfourd Jones, of Brecon; silver medal, Thomas Griffiths, of Carmarthen; certificates, 3. Frederick T. Roberts, of Carmarthen; 4. William Henry Griffin, of Banbury; 5. Ebenezer Diver. Medical Jurisprudence—Gold medal, Edward Ellis, of London; silver medal, Frederick T. Roberts; certificates, 3. equal, William Saul, of Banbury; Thomas Griffiths, of Carmarthen. Midwifery—Gold Medal, William Henry Griffin; silver medals, 1. Francis Young, of London; 2 Frederick T. Roberts; certificates, 4. Edward Ellis; 5. Edward R. B. Reynold, of London; 6. Joseph N. S. Shrapnel, of Ventnor, Isle of Wight; 7. Henry Thomas Marriott, of Colston Bassett, Notts; 8. Alexander Bottle, of Dover; 9. John Roberts, of Kidwelly. Botany—Gold medal, Alexander Bruce, of London; silver medal, George W. Knox; certificates, 3, equal, Henry Arnott, of London; Edward Thomas Blake, of Taunton. Liston Clinical Medal, for reports and observations on Surgical cases in the Hospital. —Gold medal, Richard Dawson, of Brighton.

CHARING-CROSS HOSPITAL MEDICAL COLLEGE.—The annual distribution of the prizes took place on Tuesday, July 23. The following gentlemen were the successful candidates:—Anatomy, Senior—silver medal, Mr. W. Morgan, Park-street, Grosvenor-square; certificate, Mr. Threadgale, Great Dover-street. Anatomy, Junior—bronze medal, Mr. J. Simpson, Marksbury, near Bristol; first certificate, Mr. W. Carter, Newbery, Berks; second certificate, Mr. J. Churchill, Poole, Dorset. Chemistry—silver medal, Mr. W. Carter; certificate, Mr. T. C. Wigg, East Dereham, Norfolk. Surgery, Senior—silver medal, Mr. M. H. Humphreys, Markham-square, Chelsea; certificate and book, Mr. C. J. Myers. Surgery, Junior—bronze medal, Mr. T. C. Wigg; certificate and book, Mr. Walter H. Cope, Buckingham-street. Physiology, Senior—silver medal, Mr. L. C. Badcock, Crescent-place, Camberwell-grove; certificate, Mr. F. C. Skegg, St. Martin's-place. Physiology, Junior—bronze medal, Mr. J. H. Simpson; certificate, Mr. Walter H. Cope. Materia Medica—silver medal, Mr. Wigg; certificate, Mr. F. C. Skegg. Botany—silver medal, Mr. E. A. Browne, Montague-place, Russell-square. Midwifery—silver medal, Mr. F. Cooper, Hornchurch, Essex; certificate, Mr. Thomas Dobson, Fleetwood, Lancashire. Forensic Medicine—silver medal, Mr. M. H. Humphreys; first certificate, Mr. Parsons, Warwick; second certificate, Mr. Dobson; third certificate, Mr. Cooper.

"CAPPING" EDINBURGH MEDICAL GRADUATES.—The ceremony of "capping" the students of the Session 1860-61, who have obtained the Degree of M.D., took place on the 1st instant. The proceedings having been opened with prayer, the Graduates, who sat in the body of the Assembly Hall, and wore their gowns and caps were shortly addressed in Latin by the Principal. They then advanced one by one to the table, where they were announced by Professor Balfour, and capped by the Principal, Sir D. Brewster. As the graduates returned to their seats, they were all more or less

cheered. The proceedings were concluded by Prof. Allman, who delivered an admirable address. On the conclusion of the address, the Graduates received the right hand of fellowship from the Principal and Professors. The following are the names of those who got their degrees. Three asterisks are affixed to the names of those gentlemen who received gold medals for their dissertations, two asterisks for those deemed worthy of competing for the dissertation prizes, and one for those commended for their dissertations:—Charles Henry Allfrey,* England; James Anderson and John Anderson,*** Scotland; William Crawford Armstrong and Charles William Baines, England; George Granville Bantock and Michael Benny, Scotland; John Berryman, New Brunswick; Alexander Crum Brown,** A.M., Edinburgh; Andrew Robertson Cameron and Atholl Forbes Carrington, Scotland; Thomas Smith Clouston,*** Orkney; Kenneth William Cumming, Canada; David Cuthbertson, Scotland; Thomas Clifford Davies,* England; Thomas Thomson Dick, Scotland; Campbell Mellis Douglas, Canada; Adam Fletcher, England; John Callender Gooding,* Barbadoes; Thomas Scott Gray,** Archibald Hamilton,* and Thomas Howden,* Scotland; Thomas Jackson, England; David James, Scotland; George Johnstone, England; David Kydd, John Linton, and David Little, Scotland; James Little,* Ireland; Frederick Lockwood Logan,* Duncan M'Cuaig, and Donald M'Iver, Scotland; John Lindsay Maclean,* Bahamas; Kenneth M'Leod,** A.M., Aberdeen, James M'Nee*, and Donald M'Rae,* Scotland; Stephen James Meintjes,** Cape of Good Hope; John Meredith* and William Withers Moore, England; John Nairne,* Scotand; Daniel Power O'Herlehy, Ireland; Edward Bunbury Passmore, England; James Pettigrew,** Scotland; John Dunn Porter, Ireland; Samuel Henry Ramsbotham, England; Robert Reid, Scotland; Arthur Renwick,* A.B., Sydney, Australia; John Roberts,* England; Daniel Grant Robertson and William Robson, Scotland; H. S. Edward Schroeder, East Indies; Robert Bird Selby, Berwick; John Larden Seller, England; Andrew Shields and John Simpson,* A.M., Aberdeen, Scotland; Alfred Rickards Smith, England; William Spalding, America; Henry Steele,* and James Peddie Steele, A.B., Scotland, Frederick Steell, William Stephenson, and George Isles Swanson, Scotland; William Turner, Wales; John Wallace* and William M'Culloch Watson, Scotland; Henry George Williamson, England; William Cheyne Wilson, Scotland.

AREA, POPULATION, DEATHS, AND MORTALITY per cent. in the Spring Quarters, 1851—1861.

	In 125 Districts and 23 Sub-Districts, comprising the chief Towns.	In the remaining Districts and Sub-Districts of England and Wales, comprising chiefly small towns and country parishes.	All England.
Area in Statute Acres	2,149,800	35,175,115	37,324,915
Population enumerated:—			
March 31, 1851	8,247,017	9,680,592	17,927,609
April 8, 1861.	9,803,711	10,258.014	20,061,725
Deaths in 10 Spring Quarters, 1851-1860.	530,678	509,927	1,040,605
Average Annual Rate of Mortality per cent. of 10 Spring Quarters, 1851-1860	2·371	2·050	2·207
Annual Rate of Mortality per cent. in the Spring Quarter, 1861 .	2·282	2·086	2·151

SCENES FROM THE LIFE OF AN HOMŒOPATH.—In his Annual Address as President of the Midland Branch of the British Medical Association, Mr. Macaulay gave a curious account of the career of an Homœopath of that district, narrating "how we traced our Homœopath from his birth in the county of Bedford to his school-life in the same locality; thence his apprenticeship to a chemist and druggist in the town of Northampton; then, quitting his trade before the expiration of his indentures, how he became a divinity student at a Dissenting College at Stepney, and so on to an appointment as Baptist minister in Northamptonshire; then, by a sudden plunge, becoming for a time the manager of a hydropathic establishment; and finally, after a retirement of a few months, emerging into light as a homœopathic practitioner, with the sounding title of 'Licentiate of Medicine and Surgery of the University of Glasgow.' Gentlemen, we pursued our inquiries even into these sacred recesses; whence we learned that, after but a six months' studentship at the Andersonian University at Glasgow, our friend had obtained a license from the Glasgow College by false and fraudulent documents; and it was in this way. The Glasgow College, lax and reprehensible as they undoubtedly are, do require all candidates for their licence to produce proof of having been for three years engaged in the study of Medicine, and furnish a schedule to be filled up with full particulars as to the times and places at which such studentship has taken place. To most people, gentlemen, who had only been so engaged for six months, you would consider this what an Irishman would call 'a bit of a botherer'; and you will be desirous to learn how our friend overcame his difficulty. Gentlemen, by the very simple expedient of manufacturing a schedule, partly out of his six months' residence at Glasgow, and for the remainder he drew upon his own fertile imagination! This precious document, gentlemen—or rather an authenticated copy of it—I hold in my hand; four-fifths of which is a simple tissue of naked untruth. It sets forth that he was studying Medicine at Paris at the time when he was studying divinity at Stepney; and that he was a student of Medicine at Cleveland College, in the State of Ohio, in North America, at a time when he was preaching the Gospel at Middleton Cheney, in the county of Northampton, England! We know, also, that he never crossed the Atlantic in the course of his mortal existence. Gentlemen, this is a sad picture; and you will naturally ask, Is there no remedy for it? I regret to say there is not. The Registration Board refuse to move in the matter unless the Glasgow College first erase the name from their list; and the Glasgow College, shrinking, no doubt, from an exposure of their own culpably loose share in the transaction, decline to take any step, or even to investigate our proofs of the fraud under which their licence was obtained. Gentlemen, you will form your own opinion of the honourable dealing of the Glasgow authorities, and of the intrinsic value of a diploma granted by that body. One act of retributive justice remains to be recorded. Flushed with his easy triumph at Glasgow, our friend had the assurance to present himself for examination at our own College of Surgeons, on the faith of his Scotch licence and his precious schedule of study, and was ignominiously rejected. I learn, also, that his name has since been expunged from the lists of the Andersonian University; and I believe also from the Obstetrical Society of London, to which he had obtained access. But his name still stains the list of an honourable profession."

VACCINATION OF NÆVUS.—The following is the procedure followed by Professor Rossignol. First, punctures are made by a lancet charged with the virus in the sound skin, close to the base of the tumour, at about half a centimètre distance from each other. No hæmorrhage results from these. Next, coarse threads charged with the virus towards their extremities, are carried, by means of sewing needles, through the base of the nævus, intercrossing within its centre. Their ends are brought out in the intervals between the lancet punctures, and tied together above the nævus. While they are passed, and for some time afterwards, compression is made on the tumour so as to prevent bleeding. The threads are left in three or four days.—*Presse Médicale Belge*, No. 5.

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 780 in.
Mean temperature	61
Highest point of thermometer	80
Lowest point of thermometer	48·8
Mean dew-point temperature	53·0
General direction of wind	S.W.
Whole amount of rain in the week	0·10 in.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 3, 1861.

BIRTHS.

Births of Boys, 898; Girls, 779; Total, 1677.
Average of 10 corresponding weeks, 1851-60, 1589·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	575	650	1225
Average of the ten years 1851-60	582·1	555 6	1137·7
Average corrected to increased population..	..	..	1251
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West'.. ..	463,373	..	6	5	..	10	3	23
North ..	618,201	..	4	5	..	18	5	54
Central ..	378,058	..	3	4	3	7	5	24
East	571,129	..	..	7	1	9	3	45
South ..	773,160	..	4	9	7	14	6	49
Total.. ..	2,803,921	..	17	30	11	58	22	195

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Bashful.—We shall be happy to publish the case. It is a very creditable one, and it should be published with the name of the Author.

A Subscriber should make the enquiry of the Registrar, 37, Soho-square.

If *A Provincial* "cannot understand that it is ungentlemanlike" to accuse others of dishonesty because they express different opinions, we can only pity his congenital obtuseness, lament the faults of his education, and regret that he has not kept better company.

Libertas.—It would be quite useless to dictate to Governors of Dispensaries as to the qualifications they should require from the House-Surgeon. Each Institution is governed by laws made by those whose subscriptions support it.

J. D. may say that, entertaining the views we do as to consultation with Homœopaths, we ought to have opposed the election of Mr. Fergusson to the Council of the College of Surgeons. We considered this matter fully at the time, and thought it right simply to urge the Fellows to select the best men of the six candidates; but, above all things, to break through the old system of regular re-election. We looked upon Mr. Fergusson's treatment of Homœopaths as a very serious error on his part, but not one which should lead us to ignore his great merits as an operator and a teacher of Surgery; and we trusted that his new position would lead him to reconsider the principles by which his conduct had been guided, and that he would feel it incumbent upon him to set a good example to his younger brethren. Besides, we were assured that the only difference between Mr. Fergusson and other eminent Physicians and Surgeons, with respect to their conduct with Homœopaths, was that he openly avowed and defended his principles, while others, equally ready to attend with these men, blamed Mr. Fergusson for doing what they themselves did whenever they were asked. Sir Benjamin Brodie and Sir Charles Locock have distinctly denied this imputation. We are told that the charge is reiterated by at least four fashionable Homœopaths; but we suppose there will not be any great difficulty in deciding whom we are to believe.

A Well-Wisher of the Hall.—The question is still under consideration. It was hoped that the Medical Council, before they adjourned for the Session, would have suggested some regulation by which students who had passed an examination in Classics and Mathematics, conducted by any of the bodies recognised by the Council, would have been exempted from any other preliminary examination, either for a Medical or Surgical qualification. As the matter now stands, students are kept in a state of great uncertainty, and are also exposed to much unnecessary trouble and expense.

THE VACCINATION BILL.

A *Wiltshire Subscriber* makes the following suggestions as to Compulsory Vaccination:—

"In the first place, Medical men ought not to be required to bear the onus of enforcing the law unless the latter provides them a salary which would make them independent of private practice. And this might easily be avoided by requiring everybody, whatever be his station in life, to bring at a certain time (say within the three months specified on the notice for vaccination which is supposed to be given to all parents) to the Registrar of Births, a certificate from their own Medical man or the public vaccinator, proving that their child has been vaccinated successfully or stating the reason for its non-performance; and in the latter case the certificate should be renewed every three months till the child has been successfully vaccinated or shown to be insusceptible of it. This rule should be enforced by a penalty. The registrar should have a small premium allowed for each final certificate (as at present) so as to make it worth his while to look after the fate of the children he has registered in his books. Again, the law ought to provide that every person who has not had the small-pox, should be vaccinated once every seven years, under penalties and provisions similar to the case of infant vaccinating. For after about that period they are as though they had never been successfully vaccinated, and the only or chief result of the law would be to transfer the liability of children to small-pox to adult-life."

ADVERTISING BY CIRCULAR.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have read in your number of Saturday last Mr. Burton's letter, as also the circular of Dr. Evans, M.R.C.P.L., addressed to the inhabitants of Woolwich, etc.

When Dr. Evans was admitted a Member of the Royal College of Physicians he subscribed to a code of Bye-Laws enacted by the College to secure the respectability of its members, one of which distinctly states (section iv. of the Rules of Conduct and Penal Bye-Laws relating to Members): "That no Member of the College shall follow systematically any line of Practice which may bring discredit on the College or on the science of Medicine." I think you and every reader of your Journal will agree with me in concluding that no line of conduct can bring much greater discredit upon the class of Practitioners to which Dr. Evans belongs, or upon the whole body of the Members of the College than the circulation of a paper to the householders of a district in the manner carried on by this gentleman. I do hope you will (in justice to the many Members of the College who endeavour by every means in their power to uphold the dignity of the College) direct the attention of the authorities of the College to this palpable breach of one of their laws; for, if instances like the present be passed over by the President and Censors in silence, the Membership of the College, which now is looked upon as conferring a status in the Profession of a high order and obtainable only through the ordeal of a very searching examination, will be looked upon as of no value and will be shunned by respectable Practitioners who, rather than be associated with advertising "Physicians," will keep aloof from entering the ranks of the Members of the College.

I am, &c.
A MEMBER OF THE COLLEGE OF PHYSICIANS BY EXAMINATION.

August 4.

COMMUNICATIONS have been received from:—

M. CLAUDE BERNARD; Professor ALLMAN; Mr. LE GROS CLARK; Dr. GRAY, Oxford; Dr. R. LEE; Mr. GARNER; Mr. SOELBERG WELLS; Dr. HEARNE; Mr. PEARSON; REGISTRAR-GENERAL; Mr. MCCOURT; Mr. BULTER; Mr. SANDFORD; Mr. FAGAN; Mr. FORBES; Dr. WHITEHEAD, Boulogne; Mr. TREWBY; and our Correspondents at New York, Berlin, Wiesbaden, Königsberg, Breslau, Naples, and Constantinople.

APPOINTMENTS FOR THE WEEK.

August 10. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

12. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

13. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

14. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

15. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

16. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ORIGINAL LECTURES.

LECTURES
ON
THE SPINAL CORD,
DELIVERED AT
The College of France,
DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,
Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture XX.
A PARALLEL BETWEEN THE CEREBRO-SPINAL AND SYMPATHETIC NERVOUS SYSTEMS.

Summary: The Differences supposed to exist between the Nerves of Organic and Animal Life more apparent than real—The Expression "Sympathetic Nerve" must, in future, be expunged from the Language of science—The Anatomical Disposition of the Organic System has been the Principal Reason of the Special Place assigned to it by Anatomists—The Ganglia have been viewed as Distinct Nervous Centres—This Opinion is erroneous—The Sympathetic Nerve is known to arise from the Spinal Cord—There exist, in reality, but two Classes of Nerves, the Sensitive and Motor Systems—The Sensitive Nerves of the Organic System differ from the others, in being unconscious—The Motor Nerves of the Organic System exclusively belong to the Vessels—Those of the Cerebro-Spinal System act upon the Tissues—The first are the Agents of Nutrition; the second are Related to Functional Activity—The Influence attributed to the Sympathetic Nerve on Secretion is not fully proved to exist—The Application of Galvanism to the Nerves is liable to create Errors in the Determination of their Powers—Other Stimulants ought, perhaps, to be preferred—The Ideas formerly expressed in this Course, on the Subject of Secretions, ought, perhaps, to be modified on this Account—The two Orders of Nerves ought to be separated from each other, in future Experiments, so as to allow each of them to be individually acted upon—Difficulty of accomplishing this in the Muscular System—The Facial Muscles alone afford a favorable Opportunity of performing the Experiment—It appears, from Experiments made on the Masseter, that the Venous State of the Blood does not always correspond to Contractions in the Muscular Apparatus—There exist, therefore, two distinct Orders of Nerves, which resemble each other in their Nature, but differ in their Action; the first is connected with Nutrition in the Tissues, and the second regulates their Functional Activity.

Gentlemen,—The functions of the sympathetic nerve, and of the cerebro-spinal system, have long been viewed as entirely different in their nature, organic life being the sphere of activity of the first, and animal life of the second. But the recent progress of physiology has shown so absolute a distinction to be unfounded. There exist certain expressions, still in use among Medical men, which ought to be expunged from the vocabulary of science, and the words "sympathetic nerve" or "cerebro-spinal system" evidently belong to this class. The difference exhibited by the two systems in their outward appearance and anatomical disposition, has been the principal source of this error. Struck with the presence of ganglia on the organic nerves, anatomists were led to consider them as an apparatus entirely distinct from the voluntary nerves; and Bichat himself, adopting in this respect the opinions in force among his contemporaries, believed each ganglion to be the centre of an independent nervous system.

The notions which formerly prevailed on this subject are now completely laid aside, and it has been proved beyond the possibility of a doubt, that, although the ganglia enjoy certain special powers, they must not be viewed as independent sources of nervous action. The sympathetic nerve is known to arise from the spinal cord; modern micrographers believe it to be derived from a distinct order of cells; and physiology fully confirms these anatomical data, for the cervical branch of this nerve is completely paralyzed by the division of the anterior roots of the seventh and eighth spinal pairs. We shall, no doubt, soon be enabled to prove, by similar experiments, that all the branches of the sympathetic nerve are derived from various regions of the spinal cord; the actual tendencies of physiology point to this result.

But the origin of the sympathetic nerve was not the only argument adduced in support of its existence as an independent system; its action on the muscular fibres was also believed to be different from that of the voluntary nerves, the contractions excited by the latter being instantaneous, while those excited by the former are slow in making their appearance. Either, therefore, the nerve-fibres conduct differently in the sympathetic system, which is not probable, or the histological elements placed under its control do not obey at once the impressions which reach them; we have already stated the latter opinion to be our own.

The nervous system, therefore, contains only two great divisions—sensitive and motor nerves: it matters little whether the subject is conscious of their action or not, their properties in both cases being identically the same. The sensitive apparatus is endowed with consciousness in the cerebro-spinal system, and does not enjoy this property in the organic nerves; but the difference is not an absolute and unconditional one; for the viscera frequently acquire a high degree of sensibility in acute diseases, and, on the other hand, the cutaneous surface, in paralytical subjects, is totally insensible to external impressions; that is to say, the feeling of pain no longer exists, but the reflex actions which are still produced, inform us that the sensitive nerves still retain a part, at least, of their usual properties.

With respect to the motor nerves, our experimental researches have led us to distinguish two kinds of these; the first being destined to reduce the capacity of the vessels, the second to increase it. We know the former to be derived from the sympathetic nerve, and believe the latter to spring from the cerebro-spinal axis. To those of the first class we give the name of vasomotor nerves; we know them, in fact, to produce contraction in the vessels by acting upon muscular elements; but the powers of the antagonist system are infinitely more difficult of comprehension; it appears to stimulate the dormant activity of the tissues to which it spreads, creating secretion in glands, contraction in muscles, and phenomena of a different nature in other parts. Whether the nerves which give rise to these effects and those which dilate the vessels are identically the same, is a matter of doubt. You are aware that contraction in muscles, and secretion in glands usually coincide with a turgid state of the capillaries; but these phenomena are not inseparably connected: the circulation of a muscle may be accelerated, without giving rise to contractions, and contractions may take place without exerting the slightest influence on the local circulation. The same being the case in glands, it may be questioned whether these various effects are all produced by the same class of nerves.

There exists a circumstance in this respect, which we have hitherto been at loss to explain: we allude to the influence which both the sympathetic nerve and the tympanic cord appear to exert upon the salivary glands. When the motor nerve is galvanised the circulation is accelerated, and secretion takes place; but when the sympathetic nerve is excited, the vessels contract, the passage of blood in the vessels is retarded, and yet the power of secretion continues. The properties of the fluid produced are, however, not the same.

The results of this experiment appear to justify the conclusion that two distinct orders of nerves preside over the functions of glands; but we ought not, perhaps, to place an implicit reliance on the stimulus employed, viz. galvanism; for M. Dubois Reymond has proved that on electrifying the nerves, an electro-tonic state is produced, which does not act upon the muscles, but upon the nerves which lie in the vicinity; they are liable, in fact, to receive a part of the superabundant electricity condensed in the neighbouring trunk. Let it be supposed, for instance, that a current passes through a nerve which lies in contact with another divided nerve, contractions will appear in the muscle connected with this latter branch, although no direct impulse has been conveyed to it; the proximity of another nerve, strongly impregnated with the electric fluid, being sufficient to create a participation in its effects.

It seems, therefore, preferable to employ other kinds of stimuli in experiments of this nature; common salt, for instance, is a powerful excitant of the nervous system, and is perfectly free from any similar inconvenience; there is no difficulty in proving this at once.

(M. Bernard removes one of the posterior extremities in a frog, lays bare the sciatic nerve, and dips it into salt water; the whole limb enters at once into a state of tetanic rigidity.)

You perceive, Gentlemen, that salt acts upon the nerves, and produces muscular contractions as readily as the agents usually employed. We have repeated the experiment on the tympanic nerve, and an abundant secretion was immediately produced in the salivary glands. We then applied this stimulus to the corresponding branch of the sympathetic

nerve, and after leaving it in contact with this substance for several minutes, we ascertained that no secretion whatever had taken place, although the vessels were contracted to such a degree as to render the venous blood almost completely black.

It would, therefore, perhaps, be necessary to modify, up to a certain point, the opinions which we had formerly adopted on this subject. There appears to exist only one nerve which acts upon the secreting powers of the gland, and that nerve is derived from the cerebro-spinal system; the effects produced by the galvanization of the sympathetic nerve being probably due to the electro-tonic state which follows. In fact, when a powerful galvanic current is brought to bear upon the nerve which dilates the vessels, the antagonist system is sometimes also excited, if the current is sufficiently strong. If, for instance, we gently stimulate the tympanic cord, the circulation is at first accelerated, and the secretion commences; but if the intensity of the current is gradually increased, the vessels contract, the passage of the blood is retarded, yet the secretion still continues to flow. In this experiment the sympathetic nerve has evidently been excited by the electro-tonic state of the tympanic cord; but on reversing the experiment—on galvanizing with great intensity the sympathetic branch which extends to the sub-maxillary gland, a similar influence is exerted on the motor nerve; circulation is at first impeded, and the blood contained in the veins grows black; but on continuing the experiment, the secreting elements of the gland will at last be excited, and the saliva will begin to flow. We, therefore, consider the action of salt upon the nerves to be a closer approach to the physiological state; and, in our opinion, all the experiments hitherto made on secretion require a complete revision; galvanism having almost invariably been employed in these researches, the results obtained up to the present time can no longer be relied upon, and the opinions expressed in a former part of this course (a) will, perhaps, be contradicted by future experiments.

The preceding considerations are equally applicable to the muscular system. When the nerve which presides over the contractions of a muscle is excited, the vasomotor branches simultaneously obey the impulse; the muscular fibres and the vessels contract at the same instant, and the venous blood assumes a dark hue. It would, therefore, be desirable to separate these two classes of nerves, in order to observe the effects produced by each of them in its individual capacity; but in the greater part of the body to do this is impossible. The voluntary and involuntary nerves are united in a single trunk, and cannot be separately excited. The muscles of the face alone are favourably disposed for this operation, being supplied with nerves from the cranial pairs, which do not mingle with each other immediately after their origin. The masseter is one of the muscles which offer the best opportunity for making this experiment on account of the peculiar anatomical distribution of its nerves. The ramifications of the sympathetic system which extend to this muscle being divided, the venous blood grows scarlet; but on galvanizing the peripheral extremity of the cut nerve the blood regains at once its primitive appearance, the muscular fibres remaining, however, in a state of perfect tranquillity. From this experiment it may be inferred that the chemical composition of the blood, which is evidently connected with the process of nutrition in the tissues, is not modified in all cases by this vital condition. We know, in fact, that muscles entirely separated from the body, and totally deprived of circulation, still retain the power of entering into contraction when excited; the physiological act in this instance is altogether independent of the state of the blood.

The system of organic life appears, therefore, to confine its action to the vessels. But the reciprocal influence of sensitive and motor nerves in the cerebro-spinal apparatus is too well known to require a proof, nor is it to be supposed that reflex actions are confined to the voluntary nerves. The vasomotor apparatus equally enjoys this important property. The influence of cold on vascular contraction evidently belongs to this class of phenomena; and you are aware that on dividing on one side the cervico-cephalic branch in animals subjected to the process of congelation the effects of cold are immediately felt on the non-mutilated side, and are slow in making their appearance on the other.

(a) *Vide* Lecture XIII. (Operative Physiology.)

It is highly probable, Gentlemen, that in the difficult and complicated study of the nervous system we meet with two distinct orders of nerves. The vessels are placed under the influence of the first, while the histological elements obey the power of the second; nutrition depends on the former, and physiological activity is aroused by the latter. The sympathetic nerve may therefore be viewed as a complementary apparatus placed by the side of the cerebro-spinal system. Both are derived from the same origin, both enjoy similar properties, but the elements on which their action is exerted are of a different nature.

ORIGINAL COMMUNICATIONS.

CLINICAL MIDWIFERY.

By ROBERT LEE, M.D., F.R.S.
Obstetric Physician to St. George's Hospital.

(Continued from page 55.)

Case 705.—On January 4, 1856, I saw a patient in labour who was in a very weak condition, and had had a fit of violent shivering. The arm of a dead and putrid child in the seventh month had presented, been laid hold of, and brought away. I recommended that the crotchet should be used to bring down the trunk when she had recovered from the exhaustion and severe shivering; the hand could not, I thought, be passed without great difficulty. I was informed that the delivery had been effected without much difficulty by passing up the crotchet and drawing the child doubled up through the pelvis, but the patient, I was informed by the Medical attendant, did not recover from the exhaustion, and died a few days after.

Case 706.—On January 15, 1856, I was called to see a patient in labour, near Knightsbridge, in whom an attempt had been made to deliver with the forceps and had failed. The head was not near the perineum even during the pains,—it was not sufficiently low for an ear to be felt. As the Medical attendant considered it, in spite of the failure, to be a case fitted for the forceps, I applied the blades over, as I believed, the sides of the head, without feeling an ear which was bad practice, and locked them, and for a considerable time made strong traction without drawing the head lower. There being no hope of success with the forceps I opened and extracted the head, and the patient recovered.

Case 707.—Mrs. B., aged 27. January 21, 1856. Confined with her first child twelve months before last September. Reports that she was delivered with instruments after being three days and four nights in labour. The perforator and crotchet were employed after a consultation. The catheter was necessary three weeks after, and sloughing followed of the posterior wall of the vagina, and the perineum had been injured. The os uteri was hard and irregular as if it had likewise been torn.

Case 708.—Mrs. P., aged 28. January 23, 1856. Confined with her first child on January 24, 1855; was thirty-two hours in labour. It was a large child, but expelled dead without artificial assistance. The urine passed afterwards with difficulty, but without the aid of the catheter. The perineum was lacerated. Inflammation and sloughing of the vagina followed, and a copious purulent discharge for five months. Dr. Lever saw this patient some time after the delivery, and great contraction of the vagina had then taken place. Bougies of different sizes were employed, and the contraction was relieved. The catamenia last appeared about May 17. She is now near the full period of her second pregnancy, and I thought it most prudent to leave the case to Nature. There were extensive firm cicatrices in the vagina, and it seemed very uncertain if the child would pass. I resolved when the labour should come on to preserve the membranes as long as possible entire, hoping that the dilatation of the cicatrices might be accomplished without any artificial aid. I did not think that the life of the child would have been preserved had premature labour been induced. After the labour had continued a considerable number of hours, the pains became incessant and violent, but the cicatrices did not yield. Fearing rupture of the uterus, Dr. H. Davies was called into consultation, and we resolved without

loss of time to deliver with the perforator and crotchet. The operation proved to be one of great difficulty, and required the utmost caution. The cicatrices at last yielded, and the patient recovered without any bad symptoms.

Case 709.—On January 25, 1856, I saw a case of puerperal convulsions, near Bloomfield-street, after a premature confinement Twenty ounces of blood had been taken away and the patient recovered favourably.

Case 710.—On Wednesday, February 27, 1856, Dr. Jones, of Sydenham, requested me to see a patient who had a great hæmorrhage, with complete placental presentation. The flooding had commenced on the Friday before, when four pints were lost. As the patient was the mother of several children, the external parts were not in a rigid state, and the hand was readily introduced into the vagina, and two fingers through the os uteri, and the feet grasped and the child extracted. It was dead. The placenta immediately followed the child, and the flooding ceased. There was an attack of crural phlebitis some time after, from which she was a considerable time in recovering. A case of crural phlebitis has more recently come under my observation, after the removal of a polypus of the uterus in the manner usually practised in France and foreign countries.

Case 711.—On March 26, 1856, Mr. Robert Dunn requested me to see a lady who had been attacked with dangerous uterine hæmorrhage near the full period of pregnancy. The flooding had been going on fourteen days. The parts were readily dilated, the patient having previously borne nine children. I passed two fingers between the uterus and placenta behind, immediately got hold of a foot, and turned without any great difficulty, and the hæmorrhage ceased. The patient recovered most favourably.

Case 712.—On May 15, 1856, I was requested to see a lady, at some distance from London, who had been forty hours in labour. An ounce of chloroform had been administered. The long forceps had been proposed, and the husband had become alarmed because the labour was not completed at the time the Medical attendant had predicted. At four p.m. pupils dilated, face suffused—in a drowsy half insensible state—bladder distended with urine, vagina swollen and very tender, child not felt to move during 24 hours, os uteri largely, but not completely dilated. The head of the child had not passed through the brim of the pelvis. An ear could not be felt. No labour pain of any importance. No progress from twelve o'clock the previous night—sixteen hours. I drew off the urine with difficulty. The patient could not with safety be left longer in labour, and as nothing but irreparable mischief could have resulted from an attempt to deliver with the forceps, I would not consent to such an attempt being made, and as there was no other method of saving her life but lessening the head and extracting the child without delay this was done, and great and long-continued force was required to complete the operation. This patient has since been delivered at the full period of pregnancy of a living child without the soothing influence of chloroform.

Case 713.—At 11 p.m. on May 26, 1856, I was called by Dr. —— to see a lady who had been in labour twenty-four hours. The presentation had not been ascertained till 9 a.m. At 11 p.m. the left arm was in the vagina. Uterine contraction not very strong. The pelvis was known to be distorted, but not in a high degree. There was only one thing to do, and that was to turn the child without injury to the uterus. The husband was anxious that chloroform should be administered, but I thought the patient would be delivered more safely without it. I proceeded to turn with the right hand. The brim of the pelvis was partly occupied by the head. I got beyond this, grasped a knee, and in a very short time had the foot in the vagina. The nates, trunk, and arms soon followed. Dr. —— then proposed applying the forceps. I got two fingers of my left hand into the mouth, and drew it out of the vagina, and the respiration went on for some time till the head was extracted, and then I poured brandy over the thorax. The child was alive when I left, and the placenta also had come away.

Case 714.—In 1856 I received a note requesting my attendance "on a flooding case of labour" in Upper Cleveland-street, to meet a friend of Dr. Richardson. It was stated to me by the Medical attendants "that the hæmorrhage had been going on two weeks, and that it was a case of complete placental presentation." The centre of the placenta had been torn with the fingers, for the purpose of rupturing the membranes and letting the liquor amnii escape. I felt the edges of the torn placenta on each side of the cervix uteri. The labour pains were strong; the head was descending, and there was every prospect of the labour being safely completed without further assistance. I left the patient to the care of the Medical Practitioner in attendance, and afterwards heard that she was safely delivered.

Case 715.—On September 14, 1856, I was called to see a patient in labour who had previously been seen by three or four Practitioners in Midwifery, and long-continued efforts made to extract the head of the child, which had been separated from the trunk, and left within the uterus. The long midwifery forceps had been employed without success. The patient was greatly exhausted, and appeared almost in a dying state. I passed my left hand completely into the uterus, and fixed the crotchet upon the head, and extracted it with considerable difficulty. Six weeks after, this patient came into Burton Ward, St. George's Hospital, with the vagina almost, if not completely closed up, about the middle. Sloughing had taken place, and this closure was the result. Her general health was good. No symptom of menstruation had been observed. She went home, and I desired her to return in a few months.

April 7, 1857.—I have not heard of this patient since she left St. George's Hospital.

The following report of this case was drawn up by the Obstetric Assistant, and is copied from the journal:—B. C., aged 20, an Irishwoman. A most imperfect history only can be obtained. This patient was confined with her first child on September 14. It appears that she sent for Mr. ——, Parish Surgeon, about 6 o'clock on the previous evening, and within twenty-four hours, he, with the assistance of four other Medical men, performed craniotomy. From the patient's statement it appears that the child must have presented with its breach, as she states they took it away piecemeal, the head of the child having come last, after a long and difficult manipulation by a Medical gentleman (which afterwards turned out to be Dr. Lee). She also states that she lost a good deal of blood during and after the operation, and was insensible for several hours. She says that, since the operation, she has not been able to retain her urine more than five minutes at a time, unless she lies in the recumbent position, and even then coughing, sneezing, etc. forces it from her. She feels quite well in herself, and has no pain of any kind. Bowels open, tongue and pulse natural. Olei ricini ʒjss. cras mane; haustus cinchonæ ʒjss. ter die.

25th.—Since her admission the urine has come away perfectly natural, and at the proper times. Complains of soreness to-day.

Examinatio per Vaginam.—There is a deformity in the antero-posterior diameter of the outlet. There must have been a good deal of sloughing of the vagina as it is much cicatrised. The uterus cannot be felt on this account. The urethra is not at all involved—it is perfectly natural and free.

28th.—Since her admission the urine has only been voided at proper times; she feels quite well in herself. Bowels regularly open. Tongue and pulse natural.

November 1.—Walks about all day without any inconvenience and feels quite well. Well in herself.

5th.—Discharged.

Case 716.—September 18, 1856. I saw a patient at Camden Town, who had been delivered of a premature child and the placenta had been retained from 4 to 10½ o'clock a.m. The cord was not broken. A portion of the placenta was hanging through the os uteri. The cervix was firmly contracted. No hæmorrhage. Ergot had been given, and repeated efforts made to pass the hand. Slowly I got the fingers introduced sufficiently to seize the placenta and extract it entire. The whole hand was not passed.

Case 717.—On September 30, 1856, I saw a patient at Pimlico who was under the care of another Medical Practitioner of experience and reputation. It was the first pregnancy, and near the full period. For some time there had been headache, œdema of legs, and bloody urine; she had been seized with convulsions and was completely unconscious. Pulse slow; ʒxij of blood had been taken away; the head shaved; cold applied, and an enema administered. I thought the patient should not be left long undelivered.

October 2.—Her Medical attendant called and informed me that she was dead. ʒxiv. of blood had been taken from

the temples. The fits went on every twenty minutes, not diminished in severity. After the second and third fit there was no return to consciousness. "After the convulsions there was clonic spasm." The labour went on, and at a quarter to seven she was delivered with the forceps, the head being then close to the perineum. The child was dead, and probably had been dead some time.

After the delivery, there was no fit for an hour and a-half, which was the longest interval she had had since the first fit. During the hour and a-half she rallied somewhat, but the fits returned, and she had one every hour and died at half-past two a.m. This lady had been in the country, and had never complained during her pregnancy, when the limbs began to swell is uncertain, but the swelling had existed some weeks.

"The question now for consideration," said her Medical attendant is, "What treatment should be adopted where œdema and bloody or albuminous urine takes place in the latter months of pregnancy? The great objection to any general rule is, that not a few women have these symptoms, and yet have no convulsions. It is a difficult question to answer. But is there a method of treatment by which these could be arrested without inducing premature labour? What treatment should be adopted, venesection or not? Premature labour should not be induced rashly in these cases."

When Mr. —— saw this patient in the morning, she said, "I am quite blind," that was before any fit took place. On preceding day she had been quite well, but at night was restless, and complained of severe headache, and some abdominal pains. Sickness early in the morning took place, and an emetic was prescribed. Died. These are all the notes that have been preserved of this case.

Case 718.—On December 2, 1856, I saw a patient with Mr. Rose, at Islington, near the full period of her sixth pregnancy. Hæmorrhage to a considerable extent had been going on several weeks; but the constitution until this morning, had been little affected, and there had been no pain. About a week before this (November 26), I had seen the patient; but the os uteri was thick, rigid, and undilated; the discharge was not great and delivery was not practicable. But on Monday, December 2, there was great faintness and hæmorrhage; the os was dilated, and the mass of the placenta was felt through it. I passed the hand into the vagina, which was full of coagulated blood; two fingers were then introduced between the placenta and uterus, and gradually the whole hand, as there was little resistance. The head presented, the hand was carried beyond this, the lower extremities seized, and the operation of turning quickly performed. A good deal of force was required to draw the nates through the os uteri. The patient recovered favourably.

Case 719.—On December 23, 1856, I was called to the Lying-in Ward of the St. Marylebone Infirmary, to a dangerous case of placental presentation, of which the following history was communicated to me by a gentleman who was present at the labour:—M. F., aged 41. Had been a servant, lately a laundress. Mother of six children. Good, quick times. Expected about latter end of December, 1856, but not certain in her reckoning. Three weeks ago hæmorrhage occurred without assignable cause. This stopped without remedies. It recurred the week following to a great extent, which induced her to send her husband for a Medical man. She lost, she stated, at this time about a quart of blood. Brandy was given, etc. She was admitted the day following—Wednesday, December 17—into the St. Marylebone Infirmary. She had slight hæmorrhage, but no pain or dilatation of os. It could not be ascertained if the placenta presented. Vagina was plugged with three pieces of sponge, as she was very low. The sponge was removed three days subsequently, and no hæmorrhage occurred. On the Monday she had slight return of the hæmorrhage, and on examination the os was about the size of a shilling, and appeared more soft and spongy than usual, especially posterior lip. Placenta not distinctly felt. Plugs reintroduced. In the evening, about 8·30, pains which had been slight and in the abdomen, appeared periodically in the back, and she expressed herself confidently to be in labour. She walked at this time from the Medical to the Lying-in Ward, and the plugs were removed, and the os was found about the size of half-a-crown, and a mass-like lobule of placenta inside the posterior lip. I felt the presentation when the patient came in, and a smart cascade of blood ensued at this time, and she lost half a pint of blood in two or three minutes. I plugged with six pieces of sponge, and she had regular pains, but at long intervals, but no hæmorrhage. Things remained in this state till 1 a.m. on the Tuesday, when Dr. Lee took the case under his superintendence. The patient being tolerably robust, with good pulse, etc., Dr. Lee removed the sponges, and deemed it advisable to deliver at once, as no good could result from delay, and the os was yielding and dilatable. He accordingly introduced his right hand into the vagina, and passed his index and middle fingers between the placenta and os uteri on the right side into the uterus past the head. The fingers were pushed through the membranes, a foot was seized and brought down. Gentle traction was then used for delivery, the other lower extremity remaining on the abdomen to guard the cord. This extremity was then brought down, and as the child advanced the right arm was drawn down, and with a little care and trouble the left arm was then extricated. The perineum being supported, the head was then extracted. The cord pulsated feebly, and the child was accordingly placed in a warm bath, brandy poured on the trunk, and as the cord ceased to beat ligatures were put on. Feeble, infrequent respirations ensued, and these grew more frequent, etc., and the child was wrapped in the receiver, and vitality in a few minutes was vigorously established. The placenta was removed in a few minutes with slight traction and separative force, and was perfect and unbroken, being rotated two or three times to ensure the membranes, etc., being perfectly removed. Very slight hæmorrhage resulted in the act of turning, and the operation was effected in a surprisingly short period—two or three minutes. In fact, little or no loss of blood accompanied the whole process, and the patient seemed almost as well after as previous to delivery, and no amount of shock was impressed on the system.

Case 720.—On December 30, 1861, at 1 a.m., I saw a case of arm presentation, with Mr. Keys. The liquor amnii had been discharged several hours. The os uteri was rigid and not dilatable, so as to allow the whole hand to be introduced to turn. The whole hand was passed into the vagina, and the fore and middle fingers through the os uteri. The arm was pushed aside, and I succeeded in a very short space of time, and without the employment of much force, in laying hold of a knee and turning the child. The patient recovered favourably.

PRACTICAL HINTS ON THE ACCOMMODATION OF THE EYE, ITS ANOMALIES AND THEIR TREATMENT.

By Mr. J. SOELBERG WELLS.

Hypermetropia—*Concluded.*

(Continued from page 81.)

Having considered the symptoms, diagnosis, and treatment of hypermetropia, let us now, in conclusion, glance at two affections of which hypermetropia is very frequently the cause, viz., asthenopia and convergent strabismus.

The former of these affections has received a great variety of names, asthenopia, hebetudo visus, impaired vision, muscular amaurosis, etc., etc. It presents the following symptoms: The patient cannot continue to regard near objects for any length of time, as in reading, writing, etc., without the eyes becoming fatigued. The print becomes confused and indistinct, the letters run into each other; there is a feeling of tension about the eye, which, if the work is persisted in, soon becomes more intense, and sometimes even assumes the character of headache, (which is often mistaken for nervous headache, or migraine;) the eye at the same time perhaps watering, becoming red, and feeling hot and uncomfortable. Yet there is nothing in the appearance of the eye to warrant this state of things. It looks perfectly normal, the refractive media are clear, vision is good the convergence of the optic axis perfect, the mobility of the eye unimpaired. Neither does the ophthalmoscope reveal anything abnormal, except perhaps a slight state of congestion of the retina and choroid. And yet the eye is perfectly useless for continued work at near objects, for reading, writing, sewing, engraving, etc.; for the symptoms of asthenopia soon show themselves, and the work has to be laid aside. Then these symptoms soon vanish, and the occupation can be resumed

until the reappearance of the annoying symptoms again necessitate an interval of rest, the longer this is, the longer will the person be able to re-continue his employment.

All ophthalmologists know from experience how wearisome such cases mostly prove in the treatment, and how unsatisfactory the result generally is after the whole routine of remedies has been gone through. Purgatives, sedatives, tonics, counter irritants, alteratives, etc., their name is legion! But yet how futile do they not almost always prove in curing this affection. But why do they prove futile? Because in the great majority of cases the asthenopia is not dependent upon any overwork of the eyes, or upon general debility, but either upon hypermetropia or upon an insufficiency of the internal recti muscles of the eye.

It was, indeed, a great boon when Donders discovered that most of these cases of asthenopia depended upon hypermetropia, and might, therefore, be permanently cured by the proper use of convex glasses. Since he first called the attention of the Profession to this important fact, I have examined a great number of persons suffering from asthenopia, and have found his statements, in all respects, completely verified.

It will be remembered that in the hypermetropic eye the antero-posterior axis is too short, or the refractive power too low, so that parallel rays are, when the eye is in a state of rest, not brought to a focus upon the retina, but behind it; so that it already requires an exertion of the power of accommodation to unite even parallel rays upon the retina. But how much greater must this exertion become when strongly divergent rays (as in reading, writing, etc.) are to be focussed upon the retina! The consequence is, that the eye cannot keep up this great strain of its power of accommodation—its ciliary muscle—for any length of time, and hence this inability to continue working at near objects for any long period; hence also the whole train of asthenopic symptoms.

It does not, however, follow that all cases of hypermetropia must of necessity be accompanied by asthenopia. It may be absent if the range of accommodation is good, and the degree of hypermetropia is but slight. When the degree of hypermetropia is great, asthenopia is always present.

The existence of hypermetropia may sometimes be overlooked in these cases, if it is but slight, or if the convex glasses are only momentarily held before the eyes. We should, therefore, in all cases of asthenopia (which do not belong to the next category), paralyse the power of accommodation by the instillation of a strong solution of atropine. The reason of this proceeding I have already fully explained in a former paper (a).

In these cases of asthenopia dependent upon hypermetropia we sometimes find, with the ophthalmoscope, that the choroid and retina are somewhat congested. And I have known patients in whom this was the case strongly advised to abstain from all work, and particularly to eschew the use of spectacles. If there is much congestion, it would be as well to rest the eyes for a short time, to use the eye-douche, etc.; but generally the congestion is but very slight, and is to be removed and prevented by the use of convex glasses. The congestion is, in fact, owing to the overstraining of the accommodative apparatus, and will disappear as soon as the necessity for this over-exertion is removed by the neutralization of the hypermetropia through convex glasses.

I must therefore strongly urge the necessity of the hypermetropic person wearing glasses *always*, for distant as well as for near objects. Thus only can he be perfectly and permanently freed from the *désagrêments* of his affection; for even although asthenopia do not exist at first, it will soon show itself if the hypermetropia be allowed to progress through the non-use of spectacles. We must insist upon his gradually accustoming himself to stronger and stronger glasses, until that number is reached which really neutralizes his hypermetropia, which he required when his power of accommodation was paralysed by atropine.

It has been thought that asthenopia might be cured by gradually accustoming the eye to weaker and weaker glasses, so as finally to render their use altogether superfluous. But the reader will now understand how just the contrary proceeding is necessary in hypermetropia. If we wish permanently to cure the patient, we must prevent all undue straining of his accommodation; and this can only be done by completely neutralizing his hypermetropia, by the use of that glass which changes his eye into a normal eye, enabling it to see distant objects perfectly without almost any but the very slightest action of the power of accommodation.

I would strongly urge the attention of the Profession to the important fact that asthenopia is almost always due to hypermetropia, and that these cases which, under any other course of treatment haunt our out-patient rooms for months and years without relief, may be speedily cured by the proper treatment, of their hypermetropia. Let us but consider the crowd of sempstresses, watchmakers, engravers, etc., who are rendered incapable of following their employment, whose future is starvation, if this fact is not attended to!

I have already, when speaking of myopia, (b) referred to another, but far less frequent cause of asthenopia, viz., insufficiency of the external recti muscles. This frequently occurs in the short-sighted, and may be permanently cured by a tenotomy of the external recti muscles, or by exercises with prisms. I shall, however, in future papers on strabismus, etc., return to this subject.

Donders has also proved that convergent strabismus almost always depends upon hypermetropia. The reason of this is, that with the increase of the convergence of the optic axes there is also an increase in the power of accommodation. This assertion is proved by the fact that if we place a prism (with its base turned outwards) before a hypermetropic eye, the latter will squint inwards in order to avoid diplopia in looking at distant objects, and this convergence will enable the eye to accommodate for parallel rays (distant objects), whereas, with parallel optic axes, it before required convergent rays, *i. e.*, the rays from a distant object had to be rendered convergent by means of a convex glass in order to be brought to a focus upon the retina. Again, if we place a concave glass before a normal eye we change it into a hypermetropic one; parallel rays are united *behind* the retina, and it either requires an effort of accommodation, or a convex glass to bring them to a focus *on* the retina. If the concave glass is but of slight power, an increased effort of accommodation, an increase in the convexity of the crystalline lens will neutralise the effect of the concave lens and overcome this artificial hypermetropia. But if the concave glass is too strong for this, the eye often overcomes its effect by squinting inwards, and thus increasing its power of accommodation. Now the same thing often occurs in hypermetropia; the eye squints inwards in order to increase its power of accommodation. This has been called periodic squinting. In the beginning no deviation of the optic axis is observable as long as the person is not looking sharply at anything; but as soon as he looks sharply at any object, near or distant, convergent squint shows itself. Sometimes this only occurs when the eye is looking at near objects, the squint disappearing as soon as the eye regards distant objects. After a time the squint becomes permanent, particularly in those persons who are always "fixing" objects, whether in reading, writing, sewing, etc. We meet with it very frequently in children about the third or fourth year, when they first look sharply at things, or begin to use their eyes for any length of time for near objects. When this tendency to squint first shows itself it may be corrected by neutralising the hypermetropia by means of convex glasses, but will generally require an operation.

Since Donders first pointed out the connexion between hypermetropia and convergent strabismus, I have made a point of examining a great many cases of squint, and have found that hypermetropia was present in the great majority of convergent squints. The degree of hypermetropia is generally not very great, mostly varying from $\frac{1}{40}$ to $\frac{1}{16}$ or $\frac{1}{12}$.

There are, of course, other causes of convergent squint, such as myopia, paralysis of the antagonist muscle, opacities of the dioptric media, etc.; but I reiterate, that of all these causes hypermetropia is by far the most frequent.

I have stated that in childhood this form of squint often arises, that in order to correct the hypermetropia by a stronger action of its power of accommodation the child involuntarily, unwittingly squints inwards when it wants to see any object distinctly. This squint soon becomes permanent, the image of the squinting eye is suppressed (in order to avoid diplopia), and its vision is very frequently soon irremediably destroyed, if a timely squint operation be not performed. Yet there is

(a) See p. 647.

(b) See p. 491

amongst some ophthalmologists a strong opinion that a squint should not be operated upon in childhood. But how erroneous is this advice, how many eyes have not been sacrificed through following it!

If, for instance, a child suffers from hypermetropia, and squints inwards in order to increase its power of accommodation, this squint will soon become permanent. To avoid diplopia the image of the squinting eye is suppressed by the brain; but this negation of the pseudo-image soon leads to deterioration of sight, and the vision of the squinting eye is gradually greatly impaired, or even sometimes almost completely destroyed. Hence the necessity of operating on a squint as early as possible, whilst the sight is yet good. I have not the slightest hesitation in saying that the sight of the squinting eye would thus be saved in the greater number of (if not, indeed, in all) such cases.

If, after the squint operation in eyes suffering from hypermetropia, the latter is not neutralised by convex glasses, the strabismus may recur, and a relapse take place.

It would lead me too far to enter more fully into this interesting and important question at the present time; I shall therefore reserve this subject (the necessity of operating at an early age for squint, the impairment of vision through the negation of the pseudo-image by the brain, etc.) for fuller discussion when treating of strabismus, etc.

16, Savile-row, W.

(To be concluded.)

ACCOUNT OF A FATAL CASE OF INTUSSUSCEPTION IN AN INFANT NINE MONTHS OLD.

By JOHN C. THOROWGOOD, M.D.

The following account of a fatal case of intussusception in an infant may be of interest in connexion with the one reported by Dr. Rose in your Journal for June 8, p. 597.

I give the case from notes made at the time of attendance. On the evening of Monday, September 10, 1860, I saw a little girl, aged nine months, of whom the following history was given: The child, from birth liable to attacks of pain in the bowels with constipation, has since Wednesday, September 5, been very uneasy, with griping pains in the abdomen, the bowels have been constipated, and there has been no motion since Friday, September 7, though repeated doses of castor-oil have been given.

During last twenty-four hours she has had much vomiting, with severe colic-like pains, and blood and mucus have passed into the napkins from the bowels.

On examining the abdomen, a large elongated tumour is felt occupying the left side; it is not tender when handled, and its precise limits are not easily defined.

Believing the case to be one of intussusception, I tried enemata of gruel and oil thrown far up into the bowel, and at the same time gave wine and water with some half drop doses of tr. opii to quiet the stomach. The enemata brought away some fæcal matter and the opium quieted the stomach and soothed the system, but the obstruction remained firm.

September 11.—The child was quiet during this day, and took beef-tea and wine and water, attacks of vomiting came on at rare intervals.

12th.—This morning stercoraceous vomiting is marked; during night the child has been much convulsed, and the vomiting has been severe. The tumour is smaller and is tender. A powder with half a grain of calomel was now given, and the small doses of opium given at varying intervals according to the symptoms. The enemata were continued, and frequent injections of beef-tea were administered with some port wine in them.

13th.—Child evidently sinking, but quiet; takes beef-tea and wine by mouth; there has been no blood from the bowels, but some shreds of membrane are shown as having passed. Every attempt was made to sustain the strength in the bare possibility of a natural cure by sloughing, but towards evening great prostration came on, and at 3 a.m. September 14, the child quietly died.

I made a post-mortem examination at 8 a.m. next day.

On opening the abdomen, there is no fluid, no adhesions or recent lymph; the small intestines are distended with gas and pale in colour; rectum and lower part of colon quite empty. At the juncture of the transverse and descending colon a large complex knot of invaginated bowel is found, it consists of the colon with the cæcum and part of the ileum; and as these are drawn out, a livid knuckle of the small intestine (jejunum) with its mesentery, slips out of the large tumour. The colon appears a very large one for so young an infant. No adhesions, no softening or gangrenous appearance anywhere.

This case resembles that reported by Dr. Rose, in the near equality in age of the patients, in the seat of the obstruction being at the juncture of the transverse and descending colon, and in the marked absence of all adhesions.

In Wood's "Practice of Physic," Vol. i. page 645, is the account of a very similar case, of an infant in whom the colon, cæcum, and ileum, were invaginated within the descending colon, the tumour involving also the duodenum and part of the jejunum.

It has been observed that the natural cure by sloughing is (a) especially rare in cases of intussusception in infants, and the observation of such cases as the one I have tried to report causes one readily to understand this.

The marked absence of signs of peritonitis and of adhesions noted by Dr. Rose and by myself, may be points worth consideration in reference to the trial of a Surgical operation in these cases of unyielding obstruction of the bowels.

Upper Seymour-street.

CASE OF ALLARTON'S OPERATION.

By JOHN BRAKE,
Assistant-Surgeon 2nd Sikh Cavalry, Staff-Surgeon of Saugor.

I do not suppose that Allarton's operation for the removal of stone requires any testimony from this part of the world to recommend it to practical Surgeons; but the case I send contains one feature that may be new to some readers. It has been urged against the operation, that stones above a small size, cannot be drawn through the neck of the bladder without injury to the part, and one Surgical teacher fixes a limit at one inch in diameter. I had myself removed a stone the dimensions of which were 21 lines × 18 lines × 11½ lines from an adult with the greatest ease, the man having command over his bladder from the time of the operation, and doing so well as to be discharged cured on the tenth day: so that I had not the fear of inextensibility of the parts to deter me in the case now recorded.

N. S., a native boy, aged about 13 years, was brought to me, having suffered symptoms of stone for more than three years. He presented a most pitiable appearance, as though in the last stage of an exhausting and painful disease. Slight movement of the body caused pain in the region of the bladder; the urine was constantly dribbling away, and frequently mixed with blood. On passing a sound along the urethra, it struck against a rough surface at the mouth of the bladder, and careful manipulation was necessary to pass the end of the sound upwards between the pubes and the front of a large stone.

On examination by the rectum the stone appeared to be about the size of an orange. I determined to open the membranous portion of the urethra by median section, and to crush the stone in the bladder through the wound thus made.

On December 30, 1860, assisted by Dr. W. J. Thomson, I proceeded to operate. The staff was introduced with some difficulty, and the bladder found contracted upon the stone. The external incision was about an inch long, and there was very little bleeding; with the forefinger of the left hand, the surface of the stone could be broken down, and, believing that it might be chiefly of the friable character, I introduced the ordinary forceps, and attempted to break down the calculus, but was only partially successful. With a L'Estrange's calculo-fractor, however, readily adjusted through the external wound, I was able without difficulty to crush the remaining stone into four large pieces; these were removed by means of the forceps, assisted by my finger in the rectum. The smaller fragments and broken down

(a) *Vide* Tanner on "Diseases of Infancy and Childhood," p. 7.

phosphates were extracted from the bladder by the scoop and finger.

The weight of the calculus was 3 ounces and 2 drachms, and it was composed chiefly of lithie acid round a central nucleus; the whole being coated with phosphates. The first fragment was chiefly lithie acid with external phosphates; dimensions 25 lines × 17 lines × 16 lines; the 2nd, chiefly lithic acid with very little phosphates, 17 lines × 13 lines × 13 lines; the 3rd, almost entirely phosphates, 21½ lines × 13 × 13 lines; the 4th, lithic acid with very little phosphates, 15 lines × 10½ lines × 7 lines.

On December 31, the report was that the patient had slept well, and been free from pain; the urine passed frequently, but there was full command over the bladder. All the urine passing from the wound, except at the time of coughing, when a little is expelled through the urethra.

January 3.—More than half of the urine passed by urethra.

4th.—Only a few drops through the wound.

7th.—The same—the bowels having been confined four days, and the patient uncomfortable in consequence, a dose of castor oil was given.

8th.—The oil had acted four times, the wound was quite healthy, but more urine passed by it than before.

18th.—All urine passed by the natural passage.

25th.—Patient discharged cured, greatly improved in appearance.

He has continued to improve, and is now in good condition and free from any inconvenience.

Saugor, Central India.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.
Assistant-Physician to the Metropolitan Free Hospital.

ST. BARTHOLOMEW'S HOSPITAL.

PROFUSE VAGINAL HÆMORRHAGE OF TWO YEARS' STANDING—FIBROUS TUMOUR OF THE VAGINA—ENUCLEATION—RECOVERY.

(Under the care of Mr. PAGET.)

[Reported by Mr. EDLIN.]

Mr. Paget expressed a strong opinion that the tumour removed in the following case was not of uterine origin. It occupied the submucous tissue of the vagina, and although in close proximity with the cervix, was not in any way connected with it. The operation performed was, of course, the same in character as those occasionally adopted for the enucleation of uterine fibroids, excepting that it did not involve injury to the tissue of the organ in question. Vaginal fibroids, of which it affords an example, are probably very rare.

Mary N., aged 47, a woman, of very anæmic aspect, was admitted on July 4. Her general health was good until about August, 1859. She is the mother of three healthy children. She says that fourteen years ago a tumour of eight years' growth, of the nature and precise position of which she is ignorant, but at all events a tumour connected with her organs of generation, and protruding between the vulvæ, was removed at St. George's Hospital. She gave birth to a child soon after recovery from the operation, and had excellent health for twelve years after. About two years ago she began to lose blood frequently, sometimes with the intermission of only a day or two, in small quantities per vaginam, but was able to move about as usual without much inconvenience. During the last three months, however, the hæmorrhage having been more copious, she has been more or less confined to her bed. Throughout life she has been in the habit of losing a good deal of blood at the catamenial periods, which recurred fortnightly, but during the last two years she has menstruated (if at all) without her knowledge. During this period the hæmorrhage has, in fact, been continuous. Her Medical attendant in the country a week or two since discovered a tumour in the region of the uterus, and advised her to come into this Hospital in order that it might be removed, as he believed it was the cause of the hæmorrhage.

On examination there can be felt high up in the vagina on its right and anterior aspect a hard, painless swelling beneath the mucous membrane, somewhat larger than a hen's egg. It does not seem to be connected with, although close upon, the os uteri, and pressing against the uterus itself. The hæmorrhage might, therefore, be accounted for by the irritation and pressure of this unnatural growth, which causes the vessels in its neighbourhood to become congested and occasionally to burst and discharge their contents.

July 5.—The patient's only complaint is that of the extreme weakness which necessarily accompanies such a constant flow of blood. Pulse 100 (small and weak); appetite good; bowels open; urine free and reported of good colour.

Ordered the following mixture:—℞ Acid gallic ♏x.; acid sulph. dil. ♏x.; syrupi rhœados ʒss.; aq. menth. viridis, aq. destillatæ, āā ʒvss. M. Fiat haust. ter in die, s. A good diet was also ordered.

10th.—Since the last report no hæmorrhage has occurred, and she seems in somewhat better condition. In other points as before.

11th.—The patient having been placed under the influence of chloroform, and held in position as if for lithotomy, Mr. Paget introduced a long pair of hooked forceps, caught the tumour, and having dragged it down beyond the vulvæ, divided the mucous membrane upon it, and shelled it out entire with the forefinger without much trouble. Very little hæmorrhage accompanied the operation. A piece of lint wetted with cold water was applied to the parts, and the patient, after exposure to the air for a short time, was removed to her bed. She was rather faint after the operation, and did not readily recover from the chloroform. Ordered to have some arrowroot and brandy during the day.

The tumour proved to be one of truly fibrous character, smooth to the touch, oval but rather flattened on one side, considerably larger than a hen's egg, and about four and a-half ounces in weight.

Evening.—There having been a little hæmorrhage during the afternoon, and as she is not in a condition to bear the loss of much blood with impunity, it was thought safer, in addition to keeping the parts well wetted with cold water, to introduce a plug into the vagina. Complains of headache and pain in the loins. Has been sleeping a little since the operation, but from continual nausea is disinclined for nourishment. Skin moist; pulse 120. Ordered an opiate, to be repeated if necessary.

12th.—No signs of a return of the hæmorrhage, and after two doses of the tincture of opium, has had on the whole a comfortable night. Has been sick once this morning: headache and pains in the back are less; pulse 120; tongue a little coated; passes water freely, without much smarting.

This patient was discharged about a fortnight after the operation. Constant sickness was the only troublesome symptom which had occurred after the operation. It had, however, gradually subsided, and she left in a most satisfactory state.

MORTIFICATION OF THE FOOT AND PART OF THE LEG—GREAT GENERAL SWELLING OF THE THIGH FROM EFFUSION OF BLOOD—AMPUTATION OF THE LEG—RECOVERY.

(Under the care of Mr. LAWRENCE.)

[Reported by Mr. GREENHILL.]

J. D., aged 27, was admitted into the Hospital, under the care of Mr. Lawrence, on February 1, with mortification of the right foot, and considerable enlargement of nearly the whole thigh. He was in a feeble condition, with frequent and weak pulse, but perfectly conscious. In the preceding July he had fallen from a stack, and received a blow on the thigh; but, although the limb remained stiff and painful for some weeks, he still continued his work—that of a dock labourer. About three months after the accident he noticed a *round, hard* lump in the upper and front part of the thigh, in which he said that he felt a kind of beating. It soon became painful, especially at night. He, however, continued

at work until Christmas, when he was obliged to give up and take to his bed. The thigh now commenced swelling, but he was still able to feel the lump above mentioned. This had, however, entirely disappeared before his admission. The pain during the time he kept his bed was very severe. Mortification began three days before he came to the Hospital. At this time the foot and lower third of the leg were cold, and of deep livid colour, approaching to black. There was no line of demarcation between the dead and living parts. The rest of the leg was considerably swelled, more or less red, with the cuticle loosening at many parts. The knee and a small portion of the thigh were healthy. About two inches above the joint the limb swelled out, the enlargement being most considerable on the inner, anterior, and outer aspects. There was no discoloration, nor did the tissues feel unhealthy, but there was a manifest fluctuation throughout the whole enlargement. This last condition, combined with the previous severe pain, suggested the question of suppuration, and a puncture was accordingly made where the fluid seemed near the suface. A few drops of blood only escaped, and the puncture was then carefully closed. The pulsation of the femoral artery could be felt at the groin, and for about four inches further. From the weakened state of the patient, and his previous habits of very free drinking, a full allowance of brandy was ordered, with beef-tea, and bark, and the leg was enveloped in a poultice, which gave ease. He was nearly in the same state on the next day, not worse, and the mortification had not extended. At a consultation held this day, there were some differences of opinion. It was doubted whether any operation should be undertaken, the circumstances were altogether so unpromising. In case of amputation, there was a question whether it should be performed below or above the knee. Having come to the conclusion that the swelling of the thigh was produced by effusion of blood, from injury or disease of an artery, Mr. Lawrence determined to leave the thigh untouched, believing that the effused blood might be absorbed, if the patient should recover from amputation. If the limb had been removed above the knee, the incisions would have interfered with the swelling of the thigh, it was, therefore, amputated below the joint, though all the soft textures of the leg were in the most unfavourable state for an operation that could be imagined.

The patient refused his consent until he should have seen his friends, and the operation was thus delayed until the fourth day after admission, when his condition had somewhat improved, fluid nourishment and stimuli having been taken freely, while rest had been procured at night.

On cutting through the integuments in front of the limb, there was an escape of fetid gas. A large posterior flap was formed, of which the component tissues were so thoroughly diseased as to seem totally unfit for the purpose. They were all infiltrated with more or less solid effusion, also pus, and so changed, that their characters were hardly recognisable. A cavity of some size in the thickness of the calf, with disorganised surface, contained pus. The thick flap was so stiff that it could not be brought forward to join the front incision until two-thirds of it had been removed in successive slices. The arterial trunks of the leg were tied although they did not bleed, and the only hæmorrhage was from an insignificant muscular branch on which a ligature was placed. The edges of the wound were brought together by sutures as well as could be accomplished under such circumstances. The operation was followed by a good night's rest, and the patient felt improved in appetite and strength the next day. The repair of such a wound was necessarily tedious, but not interrupted by a single unfavourable occurrence. The flap suppurated and granulated, being kept in place by adhesive strips and bandage. A considerable piece of skin at its extremity, which had already mortified at the time of the operation, separated slowly, leaving still ample material for a good stump.

In two or three weeks after the operation, two pints of porter daily were substituted for the brandy, which had been hitherto taken.

The removal of a limb so thoroughly diseased completely relieved the constitution ; natural appetite and rest returned with improvement in health, flesh and strength. The pulse, which had been 120, remained excited for several weeks, but had returned to its natural state before he left the Hospital in June. About a fortnight after the operation the measurement of the thigh was 22½ inches. About the middle of April it had again lost another inch. Here it continued the same, the other thigh had however increased to 19 inches in correspondence with a general increase of bulk. In this state he remained until he left the Hospital. The feeling of fluctuation, which continued for a long time, had now quite gone; the thigh had regained its normal condition, and the limb was soundly healed. He was, in fact, in perfect health, having from the time of the operation continued to improve steadily.

The exact nature of the impediment to the circulation which cause the mortification in this instance, is matter of conjecture. It seems certain that some important arterial vessel must have given way, and have poured out an immense quantity of blood, which remained in a fluid state, but which was subsequently slowly absorbed.

KING'S COLLEGE HOSPITAL.

CASE OF VERY GREAT HYPERTROPHY OF THE HEART — VALVULAR DISEASE — CLINICAL REMARKS.

(Under the care of Dr. JOHNSON.)

[Reported by Mr. GRENFELL.]

Elizabeth H., aged 27, admitted into King's College Hospital on March 4, 1861. She is a dressmaker, married, with four children. She has never been very strong, and eight or nine years ago was laid up with an abscess in the side. The "abscess" appears to have been in the left iliac region, and to have burst into the bowels, as she discharged a large quantity of matter by the bowels. Her last child is fifteen months old, and was weaned four months ago. Since then no catamenia have appeared. About seventeen weeks ago she was laid up with great pain in the joints, and pain and palpitation of the heart; this was followed by swelling of the legs. The belly and face also swelled. Six or seven weeks ago she became worse, the palpitation was very troublesome, and the belly more swollen. As she got no better, she was admitted into the Hospital on March 4. A mixture containing chloric ether, bicarbonate of soda, and hydrocyanic acid, was prescribed.

March 5.—Her skin has a yellowish tinge; face puffy, pale, rather yellowish, with darker colour round the eyes. The conjunctivæ are of the natural tint. Tongue moist, rather pale. She complains of dryness of the throat. Bowels open, and rather relaxed. She perspires freely, and says she has got very much thinner lately. Her fingers are distinctly clubbed; she does not sleep well, and dreams when she does sleep. Pulse small and intermittent. The legs are slightly œdematous, especially about the ankles, but not so much as on admission; they are covered with small purple spots. She has lived pretty well, but has had few vegetables, no beer, but for the last six weeks a little spirits, chiefly gin, every day. The belly is swollen, more especially on the right side, tympanitic, tender, and fluctuating at the lower part. The hepatic dulness extends no higher than natural, but downwards to about one and a-half inches from the umbilicus, and on the right side one and a-half inches below it. It is continuous on the left with the splenic dulness, and with the cardiac, which is slightly increased. In the left lumbar region a distinct tumour can be felt, probably the spleen enlarged. She is much troubled at times with flatulence and pain in the stomach, and has had pains in the lower part of the back. Her appetite is bad, and she is very thirsty. Her breathing is short and quick. Distinct crackling crepitation is heard on the right side, as far down as the mamma, and at the bases of both lungs behind. The resonance and vocal vibration are natural. The cardiac dulness is rather increased. The heart's beat is intermittent and tumultuous. When the patient is lying down, a bruit accompanies the systole at the base and apex, and a doubling of the first sound is heard at intervals. On sitting up in bed the bruit is not heard. The urine is high-coloured, thick, and only little more than half a-pint has been passed in twenty-four hours. It was not kept for examination.

7th.—Pulse 102. She had great pain in the abdomen yesterday, which was much swollen; to-day the pain is relieved and the swelling less. Her breath is very short;

she slept badly from pain and coughing, with some expectoration. There is no headache; the bowels are relaxed; the legs are less swollen; urine scanty, high-coloured, with a small quantity of albumen; on standing a pink deposit of lithates is thrown down; no casts were found in it. Pulse small and thready; the jugulars are full; the heart's action is much quicter, and allows a distinct double bruit to be heard at the apex and a systolic bruit at the base. There is no material difference in the sounds when the patient sits up. A mixture containing aromatic spirits of ammonia, chloric ether, and hydrocyanic acid was prescribed.

9th.—Pulse 108; respiration 44; mouth dry; skin more dusky; bowels open, not much relaxed. She was sick last night, and brought up a little bright blood. She had also pain in the chest, which was relieved by a stupe. She did not sleep well. Her breath is very short. She cannot take food. The belly is much swollen and painful, but the legs are less œdematous. An aperient of calomel and colocynth was given at bed-time.

11th.—Pulse 114; slept very badly; felt a choking sensation at times. The belly is very painful, and the legs are more œdematous. She feels very thirsty, but cannot drink on account of the pain it causes. Her breath continues very short. The pills acted very freely. The belly is less tense, so that the hard edge of the liver can be felt below the umbilicus. The motions are of a pale clay colour; urine very scanty indeed.

12th.—Yesterday afternoon, at 5.30, her breathing became very difficult and short, and at intervals convulsive working of the lips and muscles of the face came on, the mouth being kept shut. These convulsions would last for some minutes. She seemed only partially conscious. Tongue moist, rather white; pulse 120. A draught was given containing three grains of carbonate of ammonia, fifteen minims of chloric ether, and twenty of sulphuric ether. At nine o'clock she was in much the same state. She had expectorated a good deal, the sputa being mixed with streaks of bright blood. The breathing everywhere was vesicular; crepitation at the lower part of the lungs; no dulness. A stupe was applied to the chest. This morning the pulse is 108, very small. She slept at times during the night. Her breathing is very short, and she has a choking sensation in the throat. She is quite sensible, and complains of great pain in the chest and stomach. Her bowels have acted two or three times, the motions being of a more natural colour, and she passes more water. She has passed fourteen ounces since last night. She died at 10 p.m.

Autopsy.—There was a considerable quantity of fluid tinged with bile in the cavity of the abdomen. The pericardium and the pleuræ contained also a quantity of fluid. The large veins were full of liquid blood. The heart was much enlarged, weighing fourteen ounces. On opening the left ventricle, the mitral valve was seen to be greatly thickened and cartilaginous. The orifice was very small, from a large irregular mass of fibrinous deposit, apparently of recent formation, adhering to the anterior lip of the valve and almost plugging up the mitral orifice. The aortic valves were thickened and presented yellow opacity; an irregular pendulous fibrinous mass of about the size of a pea adhered to the ventricular surface of one of the valves, the others being roughened. The tricuspid valves were also thickened and opaque. The lungs were congested at the posterior portion; and there were numerous patches of pulmonary apoplexy, one occupying a large portion of the lower lobe of the left lung. The liver was large, weighing four pounds thirteen ounces. There were many spots of hæmorrhage, some of considerable size, chiefly on the surface and extending into the substance, some were beneath the peritoneal coat and detaching it from the surface of the organ. The gall bladder was full of bile. The spleen was greatly enlarged, and weighed one and a-quarter pounds; it was adherent to the liver by one small band. In numerous parts firm, whitish, fibrinous masses extended deeply into the substance, some by contracting had caused a lobular appearance on the surface. Kidneys, large and both unusually moveable, weighing seven ounces each. About three-quarters of the bulk of each kidney was of a pale colour; on cutting into it, its substance was found to be firm and hard, from an extensive deposit of fibrinous matter, which in some parts was of a yellow colour: in other parts the fibrinous mass had contracted, and produced the appearance of lobules on the surface of the organ.

The following case affords good illustration of the mechanical consequences of extreme narrowing of the mitral orifice—namely, pulmonary apoplexy, enlargement of the liver with hæmorrhage into its substance and upon its surface, enlargement of the spleen and kidneys, albuminuria, dropsical effusion into the serous cavities. The chief interest of the case, however, consists in the fact that the disease of the mitral valve was associated during life with a double bellows sound, systolic and diastolic, most distinctly heard at the apex of the heart. When the patient was first admitted the heart's action was feeble and rapid, and the sounds were indistinct; but subsequently there was no difficulty in separating the double sound at the apex from the single systolic sound at the base; and Dr. Johnson repeatedly directed attention to the case as one of very rare occurrence, one in which regurgitant and obstructive mitral disease was associated with a double bellows sound at the apex, while some obstruction at the aortic orifice was indicated by a systolic sound at the base. The diagnosis was entirely confirmed by the post-mortem appearance, and the heart is now preserved in the College museum.

GUY'S HOSPITAL.

COMPOUND DISLOCATION OF THUMB—RESECTION OF ARTICULAR END OF PHALANX—RECOVERY.

(Under the care of Mr. COOPER FORSTER.)

John M., a healthy and temperate man, aged 44, was admitted into Cornelius Ward, under Mr. Forster, March 8, 1861. He was admitted for compound dislocation of the metacarpo-phalangeal joint and fracture of the base of the first phalanx of the right thumb. There was also an extensive wound of the ball of the thumb exposing the muscles for a space of nearly three inches. The accident was caused by a steam hammer, the man at the time being rather incautious, and using his hands for removing the substance they were hammering instead of using iron tongs.

On admission he was at once put to bed, and the base of the first phalanx, which was merely hanging by the external lateral ligament, was removed, and the end placed in contact with the head of the metacarpal bone. A small splint was then applied to the back of the thumb, and kept in its situation by wet pieces of lint overlapping each other, and to which cold irrigation was applied.

March 9.—He slept slightly during the night. His pulse was good, and he had but little pain.

17th.—All was going on well until last night, when the thumb began to throb and become exceedingly painful, and this morning there was a good deal of inflammation on the back of the metacarpal bone. An incision was made into it, giving exit to some pus. He was ordered to discontinue the cold irrigation, and to have warm flannel applied over the splint and lint.

April 12.—He left the Hospital to-day with both wounds quite healed. Since the attack of inflammation, about ten days after the injury, he has not had a bad symptom. It has been dressed every day with hot flannels, latterly with dry lint. The thumb is in a natural position, and it can be flexed except at the injured joint, where it is still painful on pressure. The outer margin of the thumb is numb from the injured joint to the tip. He is only just able to feel when touched on that part. Since his admission all the medicine he has taken has been one opening pill, neither has he had any stimulus in the shape of wine or brandy.

This patient was seen by Mr. Forster three months later. The injured joint was anchylosed, but he could do his work as well as ever.

RETENTION OF MENSES FROM IMPERFORATE HYMEN—OPERATION—RECOVERY.

(Under the care of Dr. J. BRAXTON HICKS.)

Mary A. G., aged 21, was admitted into Mary Ward in January, 1861. She was a healthy, florid, well-developed young woman. Menstruation had never occurred, but for the last two years she had had monthly pains, which lately had become severe.

An examination showed that the hymen was as a dense membrane passed across the vulva, and was tensely bulging

outwards. It was dark-coloured, both from the menstrual collection behind and from the veins which ran across it. The uterus was enlarged to the size of a large Seville orange, and was pushed by the distended vagina as high as the umbilicus. Palpation upon the uterine region produced fluctuation at the hymen.

Dr. Hicks divided the membrane by a crucial incision, and removed the corners of the flaps by a pair of curved scissors. About one pint of thickened menstruous fluid poured out at the time, and about half-a-pint during the next day. The uterus subsided into the pelvis in a day or two. She was kept at rest in bed, and on light diet for a week, and recovered without a bad symptom. The orifice was gradually dilated with bougies, so that when she left, about six weeks afterwards, the vagina was of normal size, a thickened ring marking the seat of the hymen. She menstruated naturally afterwards, and her health was perfectly restored.

CONGENITAL ABSENCE (?) OF VAGINA—RETENTION OF MENSES—PUNCTURE BY THE RECTUM—GREAT RELIEF.

(Under the care of Dr. J. BRAXTON HICKS.)

E. H., aged 18, a delicate-looking but well-grown girl, was admitted into Mary Ward on April 21, 1861. She had never had any menstrual discharge, nor any vicarious hæmorrhage. Two and a-half years ago she first experienced bearing-down pains in the abdomen, etc., which had continued up to the time of her admission, lately becoming intense; according to her description, like labour-pains, being sometimes attended by pain in the breasts, and sometimes by vomiting.

On examination, the external parts were found to be well-formed, and up to the hymen the construction was normal. Beyond that point, however, there was total absence of any canal.

A catheter was introduced into the urethra, and the finger being placed in the rectum, it was found that only a very thin septum separated the two channels. About three inches from the anus an irregular semi-elastic tumour, about the size of a large Seville orange, existed in front of the bowels. This at the next menstrual period was found to be much larger, and was lower down.

It was evident that to make an artificial vagina, at least, two and a-half inches of the layer of the recto-urethral septum must be separated. Dr. Hicks, therefore, considered it a safer plan at first to puncture per rectum, with the chance that under future accumulation the perforation might give way, and thus occasional relief be obtained, leaving the sexual question for future consideration.

Dr. Hicks let out four or five ounces of thick, dark fluid. The canula was then removed, and no more fluid flowed afterwards. The relief was immediate. The patient was kept at rest for a week. She recovered excellently, and the improvement in her health was most marked. About one month afterwards the menstrual period returned, with intense pain, which was subdued by opium. No discharge of menses appeared per rectum.

Two periods succeeding this one have passed over without any pain whatever, but without discharge. Her health is now perfect.

POPULATION OF SCOTLAND.—The Inspector-General for Scotland says, that since the last Quarterly Report was published, the census of the population has been taken, by which it appears that, including the military in barracks, and the persons on board of vessels in docks, harbours, etc., on the night of April 7, the population of Scotland amounted to 3,061,329 persons, of whom 1,447,015 were males, and 1,614,314 females, giving the extraordinary disproportion of 100 males to every 111·5 females. The increase in the general population during the past ten years amounts to 5·9 per cent. But if the population be divided into its two great component and nearly equal parts, viz. inhabitants of towns and inhabitants of the country, it will be found that the increase was almost entirely confined to the towns,—seeing that in them the population in ten years increased at the rate of 10·9, that is nearly 11 per cent.; while in the country districts the increase was only 0·9, or less than 1 per cent.

Medical Times and Gazette.

SATURDAY, AUGUST 17.

A WARNING TO THE MEDICAL PATERFAMILIAS.

WE asked a Practitioner, resident in a town of England, having 40,000 inhabitants, how many members of the Profession there had been educated by their fathers, uncles, and elder brothers,—also members of the Profession. Our statistics, in reply, were as follows:—Total Practitioners 40; educated by near relatives, all General Practitioners, 14; educated by near relatives, not Medical, 13; not known whether near relatives were Medical or not, 13. So that 35 per cent. of the Practitioners in actual practice in that town as Physicians and Surgeons had certainly been educated at the expense of their near relatives, who were General Practitioners. If to these we add an estimate for those whose relatives were not known, and for those who had died recently, we should not be far in error if we were to state the number of Practitioners educated at the expense of Practitioners, at from 40 to 50 per cent. of the total number; and that this, therefore, represents the extent of pecuniary interest which the Profession has in the legislation on Medical education. And it is not difficult to see how near this must be to the truth when it is remembered that the succession to a well-established practice is an inheritance in which two sons not unfrequently share, and which descends to the third and fourth generation, as regularly perhaps as the average of property in general. It is clear, therefore, that with reference to cost alone, the schemes of the Medical Educational Bodies must afford matter for anxious consideration to every *paterfamilias* of the Profession who looks forward to his son or sons succeeding him in his old age, or at his death.

But the quality and kind of education insisted on must be also a matter for thought to the Practitioner. He is himself an educator, and has at least a deep interest in the Professional education of his own children. It is not mere learning (as he well knows) which makes the successful Practitioner, in a pecuniary sense, but a practical tact and knowledge of sick human nature conjoined with it, and this is best acquired by an early initiation into Professional routine such as an apprenticeship affords. And, moreover, there is the cultivation of a personal acquaintance with the patients amongst whom the youth is to help or succeed his father in practice, for which home education affords the only opportunity. Nor is it a matter of trifling importance what licences or titles the youthful *Medico* shall begin life with. Every Practitioner knows what a rush there has been for these since the passing of the Medical Act, and the Medical *paterfamilias* is necessarily and properly anxious that his son (or sons) shall not only have the best theoretical and practical education at the least expense, but also that he shall secure those Medical titles which educational regulations placed far beyond his own reach, or have only been attained by him in a round-about way, and at much sacrifice. Hence, in many cases (it would be curious to count in how many) we find two similar names in the "Medical Directory," which are evidently those of father and son,—the one writing himself plain "Surgeon," the other "M.B." or "M.D." For some years past the tendency of educational progress has been to render those academic titles more attainable by sons of persons of limited means, and therefore by sons of Medical Practitioners, to the manifest advantage of the Profession. And we congratulated our Medical brethren, not long ago, on the great fact that, in virtue of the new ordinances of the Scottish Universities' Commissioners, Surgery, as well as Medicine,

had got a distinct academic position, and that the Surgeon could for the future have his degree, as well as the Physician; so that there was a reasonable prospect that the whole body of General Practitioners would be placed in the social position, academically, to which they are entitled.

But the Medical Council has aimed a terrible blow at all this progress. In their recently-published "Recommendations," (which are to "Regulations" what the chick *in ovo* is to the chick hatched, and in which "should" developes into "shall,") they declare that no "University of the United Kingdom should confer a degree in Medicine or Surgery, whether that of Bachelor, Doctor, or Master, upon candidates who have not graduated in Arts, or passed the examinations required for the Bachelorship of Arts, or the examinations equivalent to those required for a Degree in Arts." Now, we will, at the risk of being tedious, explain what this really means, and we shall be surprised if the Medical *paterfamilias* is not, in the first instance, aghast at the impossible requirements demanded, and then, deeply indignant at the utter disregard of his best interests which is thus manifested by our Medical legislators.

The English and Irish Universities give the B.A. degree, but not the Scottish, which give the degree of M.A. only. For all these, with the exception of London, residence is required. The Medical *paterfamilias*, in compliance with the "Recommendation," would therefore do one of two things: he would either enter his son at Oxford or Cambridge, or some other British University; or else educate him to take the required examinations for the degree of B.A. at the University of London. Probably the latter plan would be more within his power as regards home-training and the money-cost, but what of the time and brains required?

The London University (*vide* Medical Directory for 1861, p. 219) requires for the Degree of B.A. that the candidate shall first pass a "Matriculation" Examination, to which he cannot be admitted, however much of an "admirable Crichton" he may be, until he has "completed his sixteenth year." It may so happen, therefore, that he is on the verge of seventeen when he presents himself to be examined in Mathematics: Arithmetic and Algebra; Geometry; Natural Philosophy; Mechanics, Hydrostatics, Hydraulics, and Pneumatics; Acoustics; Optics; Chemistry; Classics; the Greek and Latin languages; the English language; outlines of English History and Modern Geography; the French or German language, at the option of the candidate; Roman Classics and History, Greek Classics and History. Homer's Iliad and Odyssey, Xenophon, Cicero, Sallust, Horace, Ovid and Livy (portions of them) are the classical authors for 1861 and 1862. When he has satisfied the examiners on these subjects, he is matriculated, *i. e.* endowed by his Academic Materfamilias with the privilege of going up to his *First* Examination for B.A. But then he must be a year older (*i. e.* at least seventeen —he may be close on eighteen) and must be examined in —(Goodness gracious! again!) — mathematics, arithmetic and algebra, and geometry; also, the English language, literature and history; "*the* French or *the* German language," as the author of the Statutes pedantically puts it: Latin, too, again, and Roman history and geography. Having satisfied the Examiners, he can now go in for his *Second* Examination—provided he be a year older (say eighteen), and, oh horror! what is all this? "Candidates shall be examined in the following subjects,"—we give the very words, lest the thing should appear too monstrous to be believed,—"Mechanical and Natural Philosophy; Statics; Dynamics; Hydrostatics, Hydraulics, and Pneumatics; Optics (Geometrical); Acoustics; Optics (Physical); Astronomy; Animal Physiology; Classics; the Greek and Latin Languages; Grammar, History, and Geography; Logic and Moral Philosophy." Once more successful, at the age of nineteen, the youthful aspirant to the Degree of M.B. under the "Recommendation," is at last allowed to "buckle to" for that Degree, according to the following scheme:—A candidate for the Degree of Bachelor of Medicine of the University of London must pass, first, the "Preliminary Scientific Examination," which is "in the following subjects: Mechanical and Natural Philosophy; Statics; Dynamics; Hydrostatics, Hydraulics, and Pneumatics; Optics; Heat; Electricity; Magnetism; Chemistry; Inorganic Chemistry; Organic Chemistry; Botany and Vegetable Physiology; Zoology." We are in doubt whether, in the examinations for B.A. a knowledge of all these subjects, as already set forth, is demanded, but here there is no mistake: "Candidates," the regulation mercilessly affirms, "shall not be approved by the Examiners unless they show a COMPETENT KNOWLEDGE IN ALL the [fifteen] subjects of examination."

Let us get on, however, with this extraordinary story. In a year after passing this Examination (not sooner) he may go up to his First M.B. Examination. But then he must, subsequently to taking his Degree in Arts, have been a student during two years or more at one or more of the "Medical Institutions or Schools recognised by this University," and attended divers courses of lectures. So that he will be 21 years of age before he can go up for these examinations, which are in Anatomy, Physiology, including Histology and Comparative Anatomy; Materia Medica and Pharmacy; Chemistry in relation to Physiology, Pharmacy and Toxicology. Having passed them, he must now "tarry at Jericho" again for, not one, but two years! after which he may come up (being now twenty-three years old), to be finally examined in General Pathology, General Therapeutics and Hygiene; Surgery; Medicine; and Midwifery If successful in this last effort, he is admitted to his M.B. degree. Five years later, another successful struggle secures the candidate his degree of M.D.

If we summarise the sciences and subjects required for obtaining this M.B. degree, in accordance with the "Recommendation" of the Medical Council, we find they can be classed as follows:—

Pure Sciences	3
Mechanical Sciences	9
Mechanico-Chemical and Chemical Sciences	6
Biological Sciences	9
Medical Sciences	9
Languages	5
Departments of Literature and Philosophy	8
Total	49!

If Music, Navigation, and Meteorology were added (and why they are not required does not appear) the Bachelor of Medicine of the University of London, according to the "Recommendation" of the Medical Council, would be turned out of the Academical mill (supposing he survived the grinding) an ambulant Encyclopædia, and, we must add, an insufferable prig. Of course the true bearings on Professional interests, and the consequences of their "Recommendation" to professional Science and Art, have never been examined or discussed by the Medical Council. The whole thing is so absurd an impossibility, and such an insult to commonsense, that none but some mad Chinese pedant would even dream of it. It is, however, a *bonâ fide* exposition of the consequences of the "Recommendation," as deduced from a plain interpretation of its terms. That it can ever be acted upon is out of the question; that its results, even if it be left wholly inoperative, will be mischievous, cannot be doubted; and, unfortunately, it seems out of the power of either the Profession or the Medical Council itself to prevent this negative mischief.

We cannot conclude this warning better than by asking the Council to consider the following words of one of the

wisest of our *Dii Majores*, Latham. His caution is even more needed now than it was when uttered thirty years ago :—

"It is a truth that the whole circle of the Sciences is required to comprehend a single particle of matter; but the most solemn truth of all is, *that the life of man is threeseore years and ten.* . . . . Depend upon it, what all men, indiscriminately, are told they *ought* to know, all men indiscriminately will soon *pretend* to know, be it ever so extravagant; and when every Medical man in every town and village throughout England, be he Physician, Surgeon, or Apothecary, shall, in right of his Profession, claim the homage due to vast learning and science, there will not be wanting some Molière or Le Sage to hold us all up to the just ridicule of mankind."

MR. FERGUSSON AND THE HOMŒOPATHS.

Consultation with Homœopaths is at an end. The Professors of this nonsensical system can no longer be met by any Medical man. The only man of any eminence who ever has attended cases with them openly and avowedly now yields to the opinion of his Professional brethren. Mr. Fergusson's letter, which may be found in another column, will be received with unqualified satisfaction. Hitherto he has acted upon the principle that, as a servant of the public, he was bound to give his aid and advice wherever it was asked for—to the Felon as well as to the Duke—and he cared not whether he was sent for directly by the patient or his friends, or indirectly by a Medical man, or by a Homœopath, a Mesmerist, or a Silent Friend. Some suffering individual had need of a Surgeon, and Mr. Fergusson, as a Surgeon, felt himself bound to afford his aid. This is a clear, broad, definite principle of public duty, which we believe Mr. Fergusson has conscientiously acted up to, and still entertains. But we showed last week that it was only one side of a great question; and that Mr. Fergusson did not seem to have given due consideration to the other. He has now done so, and we feel quite sure that those who have blamed him the most, will admit the honesty of his conduct, and seeing that he has acted against his evident interest upon a principle of duty, all will forget past differences of opinion, and will hail with sincere pleasure his promise for the future "to decline any meeting, or so-called consultation, with Homœopathic Practitioners."

We may be excused if we look with peculiar satisfaction upon this determination of Mr. Fergusson to have nothing more to do with the Homœopaths. In 1858 we stood alone in exposing the falseness of a principle that could lead a great London Surgeon to accompany a Homœopath into the country, and assist him in supplanting the ordinary Medical attendants of a county family. The question was then fully discussed, and those who will turn over our pages may see all the arguments which have recently been placed before the Members of the British Medical Association after having undergone a species of retrograde metamorphosis into a bitter personal attack upon Mr. Fergusson, with the evident and express object of preventing his election into the Council of the College of Surgeons. There are always a number of unsuccessful, disappointed people, who, failing from want of ability or want of industry to obtain the confidence of their Professional brethren or of the public, are always ready to get up a cry against those who are more successful than themselves. If we condescended to imitate the "old tricks" of the *British Medical Journal*, it would be very easy to impute low motives to the present Editor. But we fully believe that he reluctantly performed what he believed to be his duty. It is with both surprise and regret, however, that we have seen the freedom of the Press degenerate into licence in his hands, and the assertion of public principle allowed to sink into such libellous personal invectives as some which have lately appeared in the organ of an Association of 2000 Brethren! It is with some satisfaction that we review our own course in this matter. As a matter of principle we have always held that consulting with, attending with, or meeting Homœopaths, must be wrong, absurd and impossible; we have also, with great regret, but with perfect clearness, shown where we thought Mr. Fergusson was especially mistaken and wrong; but we have never impugned his motives, nor have we been foolish enough to suppose that he was actuated by simple greed of gain when it was evident that he must lose ten times more than he could gain by acting up to his principles. Still less could we join in the stratagem of the clique who endeavoured, at all hazards, to support the system of election which, if continued, must have ruined the College of Surgeons. It was high time that the old system should be reformed. It was only by the popularity of Mr. Fergusson, and by the exertions of his numerous friends, that this could be done, and it would have been arrant folly to lose so great an opportunity, because on one important question of Medical Ethics Mr. Fergusson differed from the great majority of his Professional brethren. Which other Member of Council is perfect? Who is without his foibles? Who is there amongst us who has not to lament over mistakes, errors, shortcomings? We felt all this. We saw clearly Mr. Fergusson's fault; but we did not think it fair to let the one fault outweigh the devotion of a life to Surgery, and we would not join in the outcry which was raised by those who oppose all reform in the College of Surgeons, and which was joined afterwards by many better men than themselves. But once the election secured, and the new system established which will, we trust, make retirement instead of re-election the rule with the College Council, we returned to the discussion of Principles; and if we cannot flatter ourselves with having convinced Mr. Fergusson that he had formerly acted upon a limited view of a great question, we have at least the satisfaction of recording his determination to act now in accordance with those principles which the great majority of his Professional brethren agree with us in believing to be true and just. We can easily understand how hard the struggle must be for an upright conscientious man to yield a point where he has believed himself to be right, and to bow before the opinion of others he may think less enlightened than himself. We can understand how slowly a man may be brought to say to himself, "I feel that I am right; but still I surely must be wrong if all my old friends think differently, and so I will rather act upon their judgment than upon my own." We are quite sure that every candid reader will recall some period of his own life in which he has gone through some such struggle, and will congratulate Mr. Fergusson on the victory he has won in this conflict with contending principles, and will see that the battle he has had to fight with himself must have been far tougher than that with any of his assailants. All will rejoice at the "heavy blow and great discouragement" to the miserable professors of an irrational system, who can only stand when supported by the Practitioners of Rational Medicine. No one wishes to *persecute* the Homœopaths, but we will not assist them. We will let them alone—have nothing to do with them—leave them to the contempt due to their insignificance—and in a very few years Homœopathy will be forgotten—will decay like Mesmerism, Spirit-rapping, Table-turning, and other "illusions by which Quackery draws profit from the Wonder of Ignorance;" or, if it be preserved from total oblivion, it will only be by the phosphorescent gleam of rottenness which serves both as a guide and a warning to all who study the History of Popular Delusions.

THE WEEK.

It is an old adage, that lazy people give themselves the most trouble, and querulous people most suffering; and so it seems that people who give way the most to heat and thirst,

are the worst sufferers from both. The *Times'* correspondent at Turin after describing the hot, still, furnace-like air, stirred by no breeze day or night, says, speaking of the citizens, "to bear the heat is business enough for most men. They drag themselves at their own snail's pace under the porticoes, loll upon stools before the *café* shop-door, they call for more ice and iced water." But he continues, "so far as my experience goes, I think excessive heat greatly beneficial to the human frame, it must be fought, I believe, by the same weapon with which cold is overcome—by strong, manly exertion. If I give in to it, like most of my neighbours, I am soon languid, listless, and so utterly prostrate as hardly to have strength to lift the cooling ice to my lips; but if I drink wine, eschew water, take my meals regularly without consulting appetite, then move about at my usual brisk pace,—take the sunny or shady side indifferently—if I determine no longer not to mind, but to despise the heat and defy it, a new life seems to rise within me. Nor am I by any means an exception, or only in so far that my battling with the summer is a matter of choice with me; but I see men splitting stones along the sunny highway, I see carters walking stoutly beside their teams, I see troops both foot and horse, marching at their wonted pace; they seem all of them as strong and merry as in December, only a little more flushed, and one may wager they are all the healthier for being somewhat leaner and lighter."

Mr. Stillwell, of Epsom, Surgeon to the Royal Medical Benevolent College, has had 40s. damages assessed against him by a jury, on an action brought against him for slander by the butcher who supplied the College with meat. Mr. Stillwell had represented to the steward of the establishment that the meat supplied to the establishment was not according to the contract, and he felt it his duty to mention the subject in order that some change might be made if the complaint was well founded. He observed that there had been a few cases of illness among the boys, which he could not account for otherwise than by the meat that had been supplied to them not being so good as it ought to have been; but he at the same time explained that he did not suggest that the meat was in itself bad or unwholesome, but that it was rough and coarse, and these boys being delicate were unable to eat it. Surely if ever there can be a privileged communication this was one. It is the clear duty of Mr. Stillwell to see that the food of the boys is wholesome. The judge certainly agreed with this view, and said that he should give the defendant leave to move to enter a verdict in his favour, if the court above should think that he (the judge) was right in regarding the statement complained of as a privileged communication. Of course, Mr. Stillwell will follow the suggestion of the judge, and if he is put to expense by doing so, the College should indemnify him.

We learn from an American contemporary, the *Medical and Surgical Reporter*, that the street railways in Philadelphia are leading the Medical men to put down their carriages:—

"For half a century the gig or 'chair' was the favourite Professional vehicle, and yellow was the favourite colour. Fifty years ago, this simple form of carriage was in almost universal use by the Profession in this city. Dr. Rush is alluded to by his biographer, Dr. Jackson, as 'riding in a plain vehicle, with two wheels and one horse. In this open carriage we saw him facing the storms the last winter of his life.' After the 'one-horse shay' had for years almost disappeared from our streets, it has been somewhat recently revived, and is again in favour; but the street railway has had a great influence, not only in alleviating the toils of Medical men who have habitually walked, but in discontinuing, to a great extent, the practice of riding in carriages. A very large number of Physicians in active practice now accomplish their rounds between the easy alternation of walking and car-riding. In resuming the practice of walking, the Profession is reverting to the custom of a distant time."

Our contemporary adds:—

"We are, thus far, more favoured in Philadelphia with city railways than any other city; almost all streets which traverse the city having railway tracks in them. The level nature of the surface on which the city is built much facilitates the running of railway cars, and the vast extent of the ground covered renders such rapid and cheap means of conveyance indispensible to the necessities and convenience of the masses The passenger railways have become a characteristic of Philadelphia. There are about two hundred miles of railway track within the city.

"The subject of a yearly commutation ticket, to be issued to Physicians, which would pass its holder over all of the railway lines, was, two years ago, agitated, but failed for want of interest in the matter. Since that time, the railways have vastly increased in number and extent, and the subject is now worthy of an earnest reconsideration."

When shall we see all this in our own large cities?

Dr. R. D. Thomson remarks upon the connexion between the weather and the mortality from bronchitis and pneumonia, and the sickness and death from diarrhœa in Marylebone, in the month of July, founded on the following table:—

		1856	1857	1858	1859	1860	1861
Temperature	June	60·3°	62·0°	65·2°	62·3°	55·5°	60·2°
	July	62·7°	62·5°	61·0°	67·1°	57·9°	61·1°
Deaths		307	342	387	344	237	262
Bronchitis and Pneumonia		32	27	26	23	20	23
Diarrhœa	Death	25	63	65	74	15	25
	Sickness	—	4089	1605	2293	328	966

"When the heat is long sustained above 60°, the effect upon life and health, it will be observed, is distinctly traceable. This comparison, however, presents fewer anomalies when it is made on a larger community than in a more limited population, since even irregularity of registration, which is considerable, exerts a disturbing influence, especially when one month alone is the subject of examination. In contrasting 1858 with 1859, it will be noticed that heat takes some time to act on the system, for although in the July of 1859 the heat was greater, still the mortality was smaller, because the June of 1858 was hotter than that of 1859, and the prejudicial action of its temperature was exhibited in the subsequent month."

Two persons, a husband and wife, have died in St. Mary's Hospital from burns occasioned by the explosion of paraffin oil. A lighted lucifer-match is said to have been dropped into the spirit and to have set it on fire. An attempt is made to persuade the public that this oil cannot explode. It would be far better to persuade the public that it can, in order that every precaution against accident may be taken.

The following advertisement appears very frequently in the *Times* and other papers. Some explanation is certainly required from Dr. Hassall. *A priori*, his certificate appears to be most disgraceful to him. But we shall be happy to hear his defence before pronouncing judgment:—

"Liebig's Invigorative Essence.—This most scientifically-prepared and most powerful nutritive cordial ever introduced, restores to their normal condition all the secretions, on the integrity of which perfect health depends. It is a specific for debility of all kinds. There is no need for vaunting its merits in the usual charlatanic style, as, for the satisfaction of the public, Messrs. Baumgarten and Co. (the sole agents for the proprietor) have submitted it to the first analytical authority of the age, whose report is subjoined:—'Chemical and Microscopical Laboratory, 74, Wimpole-street, May 30, 1861.—Having analysed the preparation to which Messrs. Baumgarten and Co. have given the name of "Invigorative Essence," I am of opinion that it is a combination well calculated, from its containing, among other ingredients, pepsine and phosphate of soda, to prove serviceable to the debilitated, the nervous, and the dyspeptic. (Signed)

*

Arthur Hill Hassall, M.D. London, Analyst to the Sanitary Commission.' To be had of all chemists throughout the country. Price 11s. per bottle, or four quantities in one for 33s. Sole agents for the proprietor, Messrs. Baumgarten and Co., 520, Oxford-street, W., and 113, Leadenhall-street, E.C., London, to whom remittances may be made by stamps or post-office order."

An action, remarkable for the amount and contrariety of the Medical evidence, was tried last week at Croydon. A letter-sorter in the receipt of £150 per annum met with a succession of railway accidents, and for the last, which happened in October, claimed heavy damages, on account of concussion of the spine and injury to the eye-sight. Drs. Waller Lewis, Pearson, Webb, Gay, Poland, and Farre gave evidence in support of the claim. Mr. Haynes Walton, on the other side, deposed that the plaintiff had been subject to asthenopia, from the nature of his occupation, before the accident. The jury awarded £275 damages.

The story of the disgraceful rout of the Federal army at Manassas has one redeeming feature. The Medical officers did not share in the panic, but did their duty like men to friend and foe. The *Times'* Correspondent, to whom we are all so deeply indebted for his admirable letters, says :—

"I must remark that one class of officers in the Federal army did their duty nobly—the Surgeons remained on the field when all others were retiring or had left. One is reported killed; six are prisoners in the hands of the enemy, engaged in attending the wounded of both sides—an invaluable aid to the scanty Medical staff of the Confederates. There is no reason to believe the treatment of wounded or prisoners was what it was reported to have been. There may have been some isolated acts of atrocity in the heat of battle or pursuit, and it is only too likely that a building in which wounded men were placed was set fire to by a shell, but it is only justice to the Confederate authorities to say that they seem to have done all they could for those who fell into their hands."

A young votary of Esculapius has just been gazetted for the Victoria Cross. The following is the official account of the act of bravery which is his claim to the honour :—

"Hospital Apprentice Arthur Fitzgibbon, Indian Medical Establishment, for having behaved with great coolness and courage at the capture of the North Taku Fort on August 21, 1860. On the morning of that day he accompanied a wing of the 67th Regiment, when it took up a position within 500 yards of the fort. Having quitted cover, he proceeded, under a very heavy fire, to attend to a dhoolie-bearer, whose wound he had been directed to bind up; and, while the regiment was advancing uuder the enemy's fire, he ran across the open to attend to another wounded man, in doing which he was himself severely wounded."

Medicine may well be proud of her sons.

Companies which insure lives against accidents are bound to make certain that the deaths of persons insured have been caused neither by illness, by fraud, nor by intoxication. The premiums paid to these offices are so small, that they could not carry on their business if they were liable to claims on account of deaths other than purely accidental—*i.e.*, arising from elements out of the control of the person who loses his life. A curious case has been tried at Wells before Mr. Justice Byles, in which the question was raised very fairly whether a certain farmer Jutson met with his death by *accident* in the proper sense of the word, or whether wilfulness or intoxication were the real causes. The farmer having been spending the evening at various places, and certainly not proved to be other than sober, was seen on horseback, not far from his own house about eleven at night, and between four and five in the morning was heard shrieking for help, and was drowned before help could reach him, in a pond five miles *on the other side* of his own house. The best explanation that could be offered was that he had been asleep, and *that half the farmers in Somersetshire were in the habit of sleeping on horseback;* and in the absence of any evidence of suicidal intent or of intoxication, the jury gave a verdict against the Accidental Death Insurance Company. But the Company had better in future add to the list of questions proposed to its insurers, "Do you sleep on horseback?"

Out of the numerous murders and murderous assaults with which the newspaper columns are filled, the account of the murder, or, as the jury found it, the manslaughter, of a little child at Stockport, by two boys, aged 8, has features peculiarly its own, and one that points at once emphatically to a neglected duty of society. Here is the story. Two boys of the age in question were seen, in the afternoon of April 11 last, dragging along with them a younger child, two years and nine months old. It was in broad daylight, at three o'clock in the afternoon, on a kind of common near Stockport, and almost under the eyes of many persons, that the little ruffians stripped their victim, beat him with sticks and clogs, and then drowned him. Their confession and mutual recrimination when they were apprehended tell their own tale. Mr. Massey, the Surgeon, made a post-mortem examination of the deceased's body on April 14; it appeared to be the body of a strong healthy child :—

"On the front of the body and legs were a number of scratches and bruises, which were discoloured, and appeared to have been inflicted with a blunt instrument, such as a stick. The lower part of the back and buttocks was covered with bruises of a striped appearance, the flesh under which was much infiltrated with blood, which was a sign of severe violence. There were no external wounds on the head, but there were two large patches of coagulated blood between the scalp and the skull. A stick would have been the means of producing these appearances. The lungs and brain were congested. The immediate cause of death was suffocation by drowning. The bruises on the head could not have been produced after death."

Altogether, it is evident that these children, who "only went to school sometimes on Sundays," were as ignorant as little savages, and terminated the life of the unhappy babe who fell into their clutches with as little remorse as they would have felt in pulling off the legs and wings of flies, or spinning cock-chafers with a pin. Such children cannot be punished as responsible, until they are taught their duty; and they will not be taught until English prejudices consent to a Compulsory Education Bill. The parents, or, in their default, the parish, must be made to provide education, just as much as food, clothing, or medicine. If a child may be compulsorily vaccinated to save society from the possible spread of one loathsome disease, how much rather should it be educated, to save society from the contagion of all possible villany and cruelty of which brute human nature is capable.

On Saturday afternoon, a man named John Parish, 28 years of age, was engaged with others to clean out a sewer in the Southwark Bridge-road. Parish was the first to descend; others who followed finding Parish lying at the bottom, with difficulty raised him and brought him to the surface. He was conveyed in an insensible state to Guy's Hospital, where he remains without hope of recovery. If the effects of sewer gases were confined to the poor wretches who work in the sewers, such accidents would demand inquiry; still more when we think of the numbers who are subjected to these vapours in the houses and streets. Be it remembered that the costly main-drainage scheme will not in the least improve the street sewers.

THE GENERAL EDUCATION OF MEDICAL GRADUATES—EDINBURGH.

At a meeting of the Senatus Academicus of the University of Edinburgh, held on August 1, 1861, the following resolutions were passed, relative to the general or preliminary education of Medical Graduates:—

I. That the General Medical Council of the United Kingdom having transmitted to the General Secretary of this University a report adopted by the Medical Council on July 6 last, relative to Medical education, the Senatus Academicus has attentively considered those resolutions which concern the University, and will do their utmost to carry into effect the recommendations of the Council, in which in general the Senatus heartily concurs.

II. That the Senatus regrets, however, that it cannot concur with the Medical Council in one of their resolutions, which declares, "That it is not desirable that any University of the United Kingdom should confer any degree in Medicine or Surgery, whether that of bachelor, doctor, or master, upon candidates who have not graduated in arts, or passed all the examinations required for the bachelorship in arts, or the examinations equivalent to those required for a degree in arts."

III. That the Senatus must make the Medical Council aware that the question now raised by the Council—viz. the extent of preliminary education to be required of candidates for Medical degrees in Scotland—was very lately considered carefully on two separate occasions by a competent Court, first in Scotland and then in England—viz. the Scottish Universities' Commissioners and her Majesty's Privy Council: That on both occasions the arguments in favour of the view taken by the Medical Council were very fully brought before these Courts, through counsel, by the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, the Royal College of Surgeons of London, and the Faculty of Physicians and Surgeons of Glasgow; and that both the Commissioners and the Privy Council resolved that it was not expedient to require from Medical Graduates at the Scottish Universities a higher standard of general education and examination than that originally recommended to Parliament and the Privy Council by the Scottish Universities' Commissioners.

IV. That, with all deference to the General Medical Council, this resolution was come to by Courts second to none in the kingdom for knowledge, caution and impartiality.

V. That the Senatus will carry the resolutions of the Commissioners and the Privy Council into effect—which, indeed, it is bound to do by University law, as recently established by Act of Parliament.

VI. That the Senatus will not yield to the Medical Council in anxious desire to improve and maintain the educational standard of Medical graduates, whether in general or professional studies: that different views as to the best mode of attaining this object may be reasonably taken by different individuals, according to their own education, their interests, or the interests of the Medical Corporation to which they happen to be attached: but that, on the whole, the Senatus is of opinion it cannot go far wrong in its duty to the University and the public if it yield obedience to the University Commissioners and the Privy Council.

VII. That while the Senatus considers itself bound to comply with the ordinances of the University Commissioners respecting the whole manner and conditions of granting Medical degrees, it must also express the opinion that any such requirement in general studies as the Medical Council recommend would be unequal, unfair, and even impracticable in many instances, so long as the same nominal degrees in arts denote in different Universities quite different standards of acquirement in the same branches, and even imply the study of different branches: That the standard of examination for a degree in arts is now so high in this University that it would be quite unreasonable to impose such an examination on candidates for a Medical degree; nor is the Senatus aware that any other Profession has yet ventured to enact so high a qualification in Scotland; and that were so high a qualification as a degree in arts of this University, or an examination equivalent to that required for such degree, to be demanded of candidates for a Medical degree, the Senatus fears the result would be, not the advancement of the general education of Medical graduates, but the necessity of lowering the standard for the degree in arts.

VIII. That in conclusion, while thus noticing, in courtesy to the Medical Council, their recommendation as to the education of Medical Graduates, the Senate must, with great respect, take the liberty of stating that the Council seem to have gone beyond their jurisdiction in recommending to the Scottish Universities a different plan of education and examination from that which the University Commissioners have enjoined in their ordinances:—That the Medical Council are empowered by the Medical Act to take the necessary steps, according to a certain form of procedure, to secure, on the part of all persons presenting their qualification for Medical practice to the Registrar for admission into the Register of legally-qualified Practitioners, "the possession of the requisite knowledge and skill for the efficient practice of their profession"—(Clause xx.): That the Council have the right to demand this much of all Graduates and Licentiates of Universities and Medical Corporations alike, and no more; but that they are not empowered to demand or recommend that, while the Licentiates of Corporations shall be qualified to that extent, Graduates of Universities shall be qualified in a higher degree; and that the duty of fixing what that superiority should be, belongs to the authorities of the Universities.

THE NEW SYDENHAM SOCIETY.

Annual Meeting.

The third general meeting of the members of the New Sydenham Society was held at Canterbury on Thursday the 25th ult., Dr. Humphry, Vice-President, in the chair. The report and balance sheet were read.

It was moved by Dr. Richardson, seconded by Sir Charles Hastings, and carried unanimously, "That the report and balance sheet be adopted, and that they be printed for general distribution."

The ballot was next taken, and the following gentlemen were declared to be duly elected as the Officers of the Society for the ensuing year:—

President.—Thomas Watson, M.D., F.R.S., etc. *Vice-Presidents.*—Sir Henry Holland, Bart., F.R.S., James W. Cusack, M.D., A.M. (Dublin); Robert Ferguson, M.D., Geo. M. Humphry, M.D., F.R.S. (Cambridge); John MacFarlane, M.D. (Glasgow); William Bowman, Esq., F.R.S., J. Y. Simpson, M.D. (Edinburgh); Thomas Turner, Esq., F.L.S. (Manchester); D. J. Corrigan, M.D., (Dublin); C. J. B. Williams, M.D., F.R.S., George F. Evans, M.D. (Birmingham); John Hilton, Esq., F.R.S., Sir Charles Hastings (Worcester); James Paget, Esq., F.R.S., Thomas B. Peacock, M.D., T. P. Teale, Esq., F.L.S. (Leeds) *Council.*—Robert Barnes, M.D., John S. Bristowe, M D., C. E. Brown-Séquard, M.D., F.R.S, Robert Druitt, M.D., J. G. Fleming, M.D. (Glasgow); W. T. Gairdner, M.D. (Edinburgh); Charles Hingston, M.D. (Plymouth); Kelbourne King, M.D. (Hull); W. S. Kirkes, M.D., William Keith, M.D. (Aberdeen); M. Martin de Bartolome, M.D. (Sheffield); J. Moore Neligan, M.D. (Dublin); John W. Ogle, M.D., Richard Quain, M.D., W. Sedgwick Saunders, M.D., E. H. Sieveking, M.D, Robert W. Smith, M.D. (Dublin); William H. Stone, M.D., W. E. Swaine, M.D. (York); Thomas H. Tanner, M.D., Hermann Weber, M.D., E. R. Bickersteth, Esq. (Liverpool); Charles Brooke, Esq., F.R.S., Prescott G. Hewitt, Esq., Peter Hood, Esq., Edward Ray, Esq., (Dulwich); James Reid, Esq. (Canterbury); William S. Savory, Esq., F.R.S., J. K. Spender, Esq. (Bath); Frederick Symonds, Esq. (Oxford); J. Thompson, Esq. (Nottingham); Henry Thompson, Esq. *Treasurer.*—G. Hilaro Barlow, M.D., 5, Union-street, S.E. *Secretary.*—Jonathan Hutchinson, Esq., 4, Finsbury-circus, E.C.

A vote of cordial thanks to the retiring Council, proposed by Mr. Reid, of Canterbury, and seconded by Mr. Prankerd, of Langport, was carried unanimously.

Sir Charles Hastings next moved, "That the special thanks of the Society be presented to Dr. C. J. B. Williams on the occasion of his retirement from the office of President, which he has held from the commencement of the Society." The resolution was carried unanimously.

Dr. Stone next moved, in accordance, as he stated, with the expressed wish of the Council, that the Society's Laws v. and xxiii., should be altered. According to Law v. seven members of the Council were necessary to form a quorum. This had been found inconvenient, and it was now proposed to require only five. Law xxxiii. enacted, that the Council should meet at least once a month. Dr. Stone stated that in the earlier part of the Society's existence this had been necessary, but that it was not so now, and that the routine meetings without business were an inconvenient tax upon the time of the members. It was proposed that the amended law should require a Council meeting once in two months. These resolutions were seconded by Dr. Henry and Mr. Reid, and were carried unanimously.

Dr. Richardson next moved, "That the warmest thanks of the Society are due to Mr. Hutchinson for his able and indefatigable labours as Secretary of the Society." This resolution was seconded by Sir Charles Hastings and carried by acclamation.

After a few words from the Chairman, the meeting adjourned.

REVIEWS.

Méthode Pratique de Laryngoscopie. Par le Docteur Türck, Médecin en Chef S. et R. de l'Hôpital Général de Vienne (Autriche). 8vo. Pp. 120. Paris: 1861.

Seeing is believing; so modern Practitioners when they suspect the presence of disease in those parts to which certain passages lead, peep up the vagina, scan the interior of the rectum, and peer into the auditory meatus; or raising the curtain which encloses the chambers of vision, note with curious and inquiring gaze the pathological changes in the deep tissues of the eye. A man suffers from sore-throat, his Physician takes him to the window, makes him open his mouth, presses down his tongue, and thus learns by inspection all that he can learn from knowing the size, form, colour, surface, etc., of the parts which conduce to the earlier parts of the act of deglutition. With additional care he may manage to see something of the condition of the epiglottis, too; but beyond this he cannot see,—he cannot well look round the corner. Nor can a Physician look into a dark canal as the vagina, or into a carefully darkened chamber as the eyeball, without some artificial aid. In these instances the speculum and ophthalmoscope come to his assistance; and for the visual investigation of diseases deeper in the throat than the unassisted vision can reach, recent inquirers have invented the instrument the use and application of which form the subject of the essay before us.

Dr. Türck does not claim to have invented the laryngoscope, —which is, after all, only a little mirror which can be carried to the back of the throat, and in which, consequently, may be seen reflected in a good light the parts round the corner; for such a means was employed by Surgeons more than twenty years ago; but he does claim to have modified the instrument, and to have added supplemental apparatus in such a manner as to render it more generally available, and to have actually used it so frequently as to be in a position to lay down directions how other people should employ it also so as to obtain from it all the information it is capable of supplying.

The laryngoscope of Türck consists of a small mirror, varying in size, rounded or oval according to circumstances, and attached at an obtuse angle (120 to 125 degrees) to a thin straight stem and handle. It is of the first importance to obtain sufficient space in the buccal cavity for the introduction of the mirror and the mode of doing this and of overcoming the various difficulties which the tongue, tonsils, irritability of the patient, etc., throw in the way, occupies a large part of the work before us.

The first requisite for this is for the patient to protrude his tongue and to practise respiration under such circumstances for some seconds before introducing the warmed mirror, which is held like a pen and introduced with the stem at the left commissure of the lips. The position of the speculum in the throat is thus oblique. Among the obstacles to investigation by the mirror, the Author mentions the following:—Sometimes there is a difficulty in getting the tongue properly put out and flattened. In such a case some aid is afforded by requiring the patient to pronounce the vowel sound A (French) or by depressing the tongue by the finger or spatula. M. Türck, however, to overcome this great primary difficulty in an effectual manner has invented an instrument, a *tongue-forceps*, consisting of two broad pyriform blades (the lower one slit to admit the frænum) united at right angles to scissor-handles. This instrument, with the tongue drawn out and lying between its blades, is held by the patient himself, in one hand, while with the other he is required to raise his own upper lip out of the way of the light. As may be supposed a patient thus "holding his tongue" requires frequently repeated admonitions to attend to the business he has in hand. At other times the irritability of the parts about the fauces is such that the presence of the mirror induces retching and cough. M. Türck says that the patient himself can often tell the operator that this results because the mirror is directed too high or too low, or carried too far back, and then the necessary variation may be made. In other instances our end may be gained by modifying the shape or size of the speculum. When the passage of the speculum is opposed by strong tension of the velum palati, a small round mirror may be selected for use, and when by hypertrophy of the tonsils, the size and shape of the mirror must be adapted to meet the difficulty.

Having carried the speculum to the back of the fauces, what can we see? This will depend upon how the mirror lies, and precisely where, how far it is carried back or down the pharynx, etc. The free border of the epiglottis and the superior extremity of the posterior wall of the larynx are readily perceived on carrying the mirror well back into the pharynx, but to look down into the cavity and still more to get a view of the anterior angle of the glottis and the anterior extremities of the vocal cords, a more and more vertical direction must be given to the plane of the mirror, and in the latter case, especially in certain forms and positions of the epiglottis, the patient must be made to throw his head forcibly backwards, while the mirror is carried down as deeply in the throat as possible. Dr. Türck tells us that by his method of laryngoscopy, he has been able not only to investigate the condition of the larynx, but to see the mucous surface of the posterior wall of the trachea as far down as to the bifurcation of the trachea, and adds, "I have been able by this proceeding, several times to see, what no other investigator had succeeded in seeing to that time, the six first circular cartilages of the bronchiæ, and yet more, I have succeeded in exploring in this way the *right bronchus in its entire length.*"—P. 68.

It will be unnecessary for us to proceed much further in our analysis of Dr. Türck's work. The remaining chapters are occupied by a description of the mode of applying artificial illumination by means of the ophthalmoscope, the mode of illuminating these dark holes by the direct rays of the sun, of magnifying the image produced upon the mirror, and of applying laryngoscopy through an opening in the trachea. Surely this must exhaust the subject.

What is our verdict? We have tried laryngoscopy many times since our Berlin Correspondent first brought Czermak's instrument before the Profession here, but we must confess that, even after carefully studying this book, we have not succeeded in seeing all that Dr. Türck has managed to see. And the reason why we have failed, and why, even with the best instruction, others will mostly fail, is that not only the Medical man, but the patient, requires an education to the use of the instrument. We have shown how his co-operation is requisite for success, and how much reliance must be placed on him in doing what he must feel to be either very philosophical, highly ridiculous, or disgustingly uncomfortable. It is impossible to set limits to what a real sufferer can be induced to put up with in the hope of its leading to his relief; but, for all that, we cannot look at the picture at page 100, where a patient is sitting before a laryngoscope, pulling his tongue out, in the position for laryngoscopy, without the thought that the necessity for this will greatly impede, in England at least, the general adoption of this method of exploration.

The book is well illustrated, wherever illustration is requisite in explanation of the text.

Academie de Médecine.—The vacancy in the section of Pharmacy has been filled up by the election of M. Gobley by forty-one out of seventy-one votes present. M. Mialhe, who was the popular candidate out of the precincts of the Academy, polled only twenty-seven votes.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE EMPLOYMENT OF CAJEPUT OIL.

By M. DELVAUX.

M. Delvaux, after giving a historical statement of the therapeutical employment of this substance, next furnishes an account of his own experience of its use when combined with passive substances, admitting of its properties being readily judged of. He has found it of great use in advanced and painful dental caries. A drop or two is inserted into the cavity and retained there by some cotton which had been dipped in the oil. After some minutes a sense of cold and numbness ensues, and the pain rarely resists. Essential dyspepsia, accompanied by intestinal flatuosity is treated with success by the oil. A tablespoonful of a mixture of two or three parts of the oil with 160 parts of mucilage and 30 of syrup may be given every hour, or a pill containing half a grain of the oil mixed up with magnesia may be substituted. The meteorism met with in severe diseases may be combated by an embrocation formed of equal parts of olive and cajeput oils. In algid cholera the oil is quite useless, but this is not the case in cholerine, or the disturbance of the digestive organs which so often precedes the cholera. A great number of such cases, when the pulse has been small, feeble and slow, have been treated advantageously by the following mixture, aided by low diet and tepid drinks: ℞ Mucilage 140, cajeput 3, syrup 30 parts. A tablespoonful, first every quarter and then every half hour. It is usefully employed for the expulsion of ascarides, either as an electuary made with honey (1, 2, or 3 parts to 60), or as an enema, one part being mixed with 30 of distilled water by means of yelk of egg. In chronic affections of the respiratory organs, as larygitis, bronchitis, slow phthisis, accompanied by asthenia, the cajeput leads to a diminution of the dyspnœa and cough, and an easier expectoration while the appetite returns. It is of use in nervous palpitation. In two cases it was given in doses of from 15 to 45 grains in the 24 hours. In chronic vesical catarrh, the oil without curing the disease gives rise to great amendment by facilitating the emission of urine and diminishing the production of mucosities. As to its employment in rheumatism, M. Delvaux has always found it without effect while acute inflammatory action has been present. In the chronic articular rheumatism, when the pain and swelling are slight and the colour of the skin is normal, it is always useful, employed internally and by friction; but when the affection is attended with much swelling, or by deformity, or tophus, it is of no avail. In chronic myorheumatism and endorheumatism it is always of great service; while in epicranial rheumatism, in which the fibro-muscular layer of the cranium is affected, it has often effected a complete cure after numerous other remedies have failed. The same good effects have attended its employment in chronic pleurodynia and lumbago. For the muscular rheumatisms observed in those who have been exposed to the fatigue of prolonged voyages or residence in hot and humid climates, which are attended with emaciation, and in which digestion has become difficult, painful, or even impossible, in consequence of the fibro-muscular portions of the digestive canal having become involved in the rheumatism, cajeput proves a true specific, the pain disappearing under its influence and the patient recovering his health. In various *affections of the skin* this remedy is very efficacious, as acne rosacea, pityriasis, and psoriasis. In acne rosacea the oil must be applied over the whole diseased surface by means of a pencil three times a-day, placing the patient in the horizontal posture lest the vapourization irritate the eyes. The epidermis scales off and the close net-work of vessels becomes atrophied, so that in persons with fresh complexions the skin to which the oil has been applied becomes whiter than that of the rest of the face. Furfuraceous desquamations of the scalp, eyelids, and beard may be successfully treated by ointments containing the oil, and patches of psoriasis may be treated by imbibing them with the oil. This soon excites sharp inflammation and suppuration of the dermis, which excites a modifying influence upon the skin. The oil must then be replaced by soothing topical applications. Cajeput prevents the fall of the hairs, and favours their reproduction in alopecia when there is atony of the dermis or bulbs. It has proved especially useful in cases in which the eyelashes have fallen after having been dyed. In the painful atony of a joint with tumefaction and œdema met with after *sprain*, especially when the starch bandage has been used, frictions with embrocations of olive and cajeput oils soon re-establish the vigour of the part.—*Presse Médicale Belge*, 1861, Nos. 12, 13, 17, 23, 25, 30.

CASE OF TRAUMATIC EMPHYSEMA OF THE LIVER.

A case, probably unique, was recently related to the Paris Society of Surgery by M. Chabert. A drunken artilleryman threw himself from a window and died three days afterwards from the numerous injuries received, a marked jaundiced condition of the skin previously manifesting itself. At the autopsy a multitude of small, irregularly-shaped elevations of a brownish-yellow colour covered the external surface of the liver. When punctured a noise like that from the bursting of a small bladder filled with air was heard. There were three lacerations of the organ two or three millimetres only in depth. Incisions into various parts of the liver gave issue to no fluid, their surfaces being dry and of a brownish-yellow colour, and presenting numerous vacuoli like a sponge. On pressing portions of the organ between the fingers crepitation was distinctly heard. The diminution of specific gravity was remarkable, portions of any part of the liver floating in water, and when compressed under this yielding numerous bullæ, which burst on the surface, the liver then sinking to the bottom. The surface of the gall-bladder (distended with deep-coloured bile) was covered by a great number of vesicles resembling those of the surface of the liver. No cadaveric change accounted for these appearances, as the autopsy was performed soon after death. The diaphragm and the intestines being completely uninjured, it cannot be admitted that the air contained in the liver could have proceeded from either the lungs or the intestines. M. Cruveilhier's failure in his experiments to inject the biliary passages from the duodenum forbids the supposition that the air gained access to the hepatic parenchyma by a reflex passage through the choledochus. We are thus driven to the supposition that the gas must have been formed within the liver itself, probably within the cellular tissue connecting the Glisson's capsule with the glandular tissue. In the *Union Médicale*, September 8, 1855, cases are related in which emphysema of the liver was connected with internal disease; but there is no other example of its dependence upon a traumatic lesion.—*Union Méd.*, No. 84.

ON THE MODES OF TERMINATION OF EXTRA-UTERINE PREGNANCY.

By Dr. MATTEI.

In this article Dr. Mattei relates the details of a case of extra-uterine gestation which occurred in his practice, and states the following results of his examination of the details of 100 recorded cases, references to most of which he furnishes. Of the 100 women, 12 died accidentally, after having retained the result of pregnancy during several years; 5 died in consequence of the accidents of pregnancy without the cyst having opened externally. In 37 instances an opening was made into the cyst through the abdominal walls—viz., spontaneously in 21 (20 of these women recovering), in 7 with the concurrence of art all recovering, and in 9 by gastrotomy, all recovering. In 8 cases the opening took place into the bladder, 2 of the women dying. In 7, into the vagina, the opening being spontaneous and fatal in 2, and artificial, with 4 recoveries, in 5. In 31 cases the opening took place into the intestinal canal, either with the intervention of art or not, and of these 12 recovered and 19 died. The author's conclusions are:—1. Old extra-uterine pregnancies allow of life being prolonged for many years, but such cases are rare (12 per cent.), and are especially met with when the fœtus dies at an early period, and when the cyst has remained of small size. 2. Extra-uterine pregnancy may (5 per cent.) become the cause of death without the cyst opening externally or into a mucous membrane. 3. Whether the cyst gives rise to accidents prior to or subsequent to its being opened, it is not easily tolerated by the economy, and is expelled in more than a third of the cases in from one to two years, in a sixth between two and five years, and so on in decreasing progression. 4. Of all the modes of termina-

tion that by an opening through the abdominal walls, whether spontaneous or artificial, has been the most frequent (38 per cent.) and the most favourable, serious inflammatory accidents and resorptions scarcely ever occurring. 5. Opening into the bladder is rare (8 per cent.) and less often followed by recovery. 6. That into the vagina is somewhat rarer still (7 per cent.), and what is surprising is that it is much oftener fatal, especially when art does not intervene. 7. Opening into the intestine is of frequent occurrence (30 per cent.), and is the most fatal of all terminations, three out of five women dying. 8. It is imprudent to treat these cases by expectation, unless, indeed, the cyst is small; and even then it should be at once evacuated, when there are symptoms of an opening taking place, such as sudden change in the health, fever, rapid emaciation, the disappearance of fluid from the cyst, local signs of reaction, and especially diarrhœa. 9. When there is time to wait, it is best to open the cyst at different stages, caustics being often preferable to cutting instruments. 10. If we have the choice of the place where the aperture is to be made, this should be in the abdominal parietes; but if Nature has commenced the eliminating process at any point, it is there we must act, and that as promptly as possible, especially if this be the intestine.—*Gazette des Hôpitaux*, 1860, No. 110.

EXCERPTA MINORA.

On Terebinthinated Caoutchouc in Phthisis.—By Professor Hannon, of Brussels.—The purest caoutchouc is to be cut into very thin and narrow slips, and put into essential oil of turpentine (1 of caoutchouc to 2 of turpentine), and allowed to macerate until the solution is complete. The solution is of a brown colour and syrupy consistence, and if poured into water, the caoutchouc separates again, and becomes an inert substance. To avoid this it should be given as an electuary. The author forms this by adding 1 part of the solution to 30 of elder-flower-rob, flavouring it with bitter almonds, increasing the proportion as the patient becomes accustomed to the flavour. He does not state the dose very exactly, but he says that under the influence of this powerful hydrocarbonate the digestion goes on well, and the hæmatosis is improved. The cough and expectoration diminish, the night sweats and diarrhœa disappear, while strength and flesh are recovered. The caoutchouc does not prevent the simultaneous use of any other remedy symptoms may indicate.—*Presse Médicale Belge*, No. 6.

Treatment of Bubo by Injection.—Dr. Pizzorno strongly recommends the following mode of treating bubo, which he has pursued in more than 500 cases with great advantage and no ill effects:—When suppuration cannot be prevented, the bubo should be opened sufficiently only to discharge the pus and to admit the point of a small glass syringe. A solution of corrosive sublimate (two grains to three ounces) is then to be thrown in with force two or three times in succession, and after the sac of the abscess is thus well washed out, a little of the solution is still to be left within it, the aperture being then covered with some shreds of lint and compresses moistened in the solution. Pressure is also to be made with a long and broad bandage. Sometimes at the end of the first twenty-four hours suppuration has ceased, and the external application alone has to be continued. When this is not the case the injection has to be repeated every twenty-four hours until the suppuration ceases. Upon an average about seventeen days are required to obtain a complete cure of the bubo. In indolent bubo, when frictions with extract of cicuta and blue ointment, a few doses of calomel, and compression by bandages do not succeed, the author applies a blister and dresses it with a weak solution of corrosive sublimate.—*Omodei's Annali*, Feb., p. 658.

Case of Hydrophobia.—An interesting case of this fearful affection came under M. Trousseau's care at the beginning of the year. A man, aged 37, was bit by his dog, which afterwards died mad. The hydrophobia manifested itself a little more than three months after the bite, the patient dying seventy-six hours after the first manifestation of the disease. The usual symptoms were present, and on an attempt being made to convey water into the stomach by the stomach-pump, which was introduced without causing any suffocative paroxysm, the patient became livid, and as if dead. He rallied again, but soon after died. In this case the propensity to venereal excitement, which has sometimes been noted, was remarkable, and (from his wife's statement) unusual; and until the patient's death he exhibited the most frightful erotism and constant ejaculations. M. Trousseau has only witnessed four other cases of this fearful malady, a sketch of which he gives in the lecture from which we quote. He also alludes to some cases of hydrophobia occurring in persons, who had been alarmed, supposing themselves to have been bit by rabid animals.—*Gazette des Hôp.*, No. 12.

Rigidity of the Os Uteri.—M. Paul Dubois recognizes two varieties: (1) *spasmodic rigidity*, which is most common, the vagina as well as the cervix being hot and dry, and the os thin, hard, and unyielding; (2) *mechanical rigidity*, the cervix being hard also, and feeling much like unimpregnated uterine tissue. In the *spasmodic rigidity*, when the woman is robust, a small bleeding is indicated, and if she is only moderately so, a prolonged bath. M. Dubois smears, also, extract of belladonna on the cervix, but does not place much confidence in this means, preferring making small incisions by means of a guarded bistoury. A little blood flows, and the delivery soon occurs; labours which have lasted forty-eight hours, sometimes terminating in a few minutes after the operation, and no ill result ever following. In the *mechanical rigidity* no other means should even be first tried, the incisions soon terminating labours which depend upon it, while rupture of the uterus may occur if the case is left to Nature.—*Gazette des Hôp.*, No. 20.

Belladonna as an Anæsthetic.—Professor Pitha, of Vienna, relates an interesting case of herniotomy in which belladonna produced a remarkable narcotic effect, after ether and chloroform, tried for a long period, had failed to induce insensibility. Besides rubbing the abdomen with the extract, about a scruple had been injected into the rectum; and a deep sleep of twelve hours followed, no other signs of poisoning presenting themselves, except the dilatation of the pupils. Professor Pitha suggests that in this case the anæsthetic effect was due to the combined action of the substances employed, and he considers that they may act as mutual correctives of each other. He recommends that in cases like the present, proving refractory to the employment of chloroform, a mixture of chloroform and atropine should be tried.—*Wien Wochenschrift*, No. 25.

Diminution of Gout in Modern Times.—Gout, which according to the statements of the writers of ancient times, and those of the earlier period of recent times, was one of the most frequent of diseases, has now become of much seldomer occurrence. Professor Conradi, of Modena, in his work upon the subject, attributes this to the complete revolution in the mode of living which has taken place amongst civilised men. While formerly flesh and bread constituted almost the only bill of fare, vegetable food now forms a very important part of this. In a tract he has written on the subject, the Professor furnishes an interesting statement of the modes of life which prevailed at the different historical epochs.—*Froriep's Notizen*, No. 23. [In our own country, we should be disposed to attribute much influence in such diminution of gout to the altered habits with relation to drinking.]

Deaths in London in 1660 and 1860.—The Registrar-General's Report for 1859 contrasts the statistics of disease, so far as we are possessed of them, of two centuries back with those of the present day. It takes 100,000 people of the London of 1660-79, and compares them with the same number of 1859. The same number presents at the two different dates respectively 357 and 42 annual deaths by small-pox; 759 and 227 by fever, ague, scarlatina, quinsy, and croup; 1079 and 611 by consumption and diseases of the breathing organs; 763 and 8 by dysentery; 142 and 2 by scurvy; 298 and 26 by dropsy; 1175 and 136 children's deaths from convulsions and teething, and 86 and 17 women's deaths in child-bearing. All this decrease in the modern figures is over and above the decrease which we gain when we count the deaths of the Great Plague. In one article, however,—that of diseases of the brain, apoplexy, paralysis, epilepsy,—the older figures have the advantage of the later, being 57 then to 151 now. It is deserving of notice that the only form of disease which has gained ground in the country is that connected with the head, which exceeds now by nearly 3 to 1 the amount of the same form of disease at the former date, as the figures above show. This is, perhaps, the result of the very civilization and mental growth to which we are indebted for the improvements in every other sanitary quarter.

FOREIGN CORRESPONDENCE.

ITALY.

Naples, July 20.

THE CLIMATE AND THE PUBLIC HEALTH.

In one of your London cotemporaries there appeared recently a paper on Italian health-resorts, in which a truly saddening picture was drawn of this city, which, according to our esteemed *confrère*, appeared to be one of the worst places an invalid in search of health could go to. Having lived here for many years, and having seen a considerable number of invalids from all parts of Europe and America restored to health, I must consider the lament of my English colleague, however agreeable a writer he may be, as the offspring of a very superficial examination, and of a very bilious imagination. Mentone is certainly a charming place, but that is no reason why all other Italian health-resorts, Naples included, should be held up to contempt and ridicule.

The climate of Naples is, comparatively speaking, very good. Fogs are almost unknown, and, on an average, rain falls on 97 days only, while snow is scarcely ever seen. The medium temperature amounts to 62° F.; the maximum that has ever been observed was 100° F; the minimum 27° F. But such extreme degrees of cold and heat are very rare, as in the hottest months (July and August) the thermometer very seldom rises above 90°, and in the coldest (November, December, and January) generally ranges from 40° to 60°. Naples being on the sea-shore, the heat never becomes so oppressive as in many inland places, such as Rome, Florence, Pisa, etc. Not only is the radiation from the sea and the shore very considerable during the night, and the air thus rendered pure, cool, and healthy, but even in the hottest months the Libeccio, a cool breeze blowing from south-west, comforts those who have not left the city for its delightful and healthy neighbourhood, Corpo di Cava, or the outskirts of Castellamare, Sorrento, and Ischia, which are all very much frequented in the height of summer.

The heat decreases in September, and the air, which is then moistened, not only by evaporation from the sea, but also by an occasional shower, is then very pleasant. In October these showers become rather more frequent, and are considerable, especially during November. The winter is much milder than at Rome, Pisa, Nice, and Venice; while March, by the inconstancy of the weather, rather reminds one of the English climate, and April is again very fine. According to M. Vivenot's observations, the medium winter temperature here is 49° F.; that of spring, 60° F.; of summer, 75°; and of autumn, 63°. The differences in the temperature are, therefore, the smallest of all European health-resorts, Palermo alone excepted. In Nice, as in all places where large numbers of Englishmen congregate, there is much domestic comfort and good drainage, but also much draught and dust, besides the sudden changes of temperature, which are very injurious to the consumptive patient. The medium temperature of winter in Nice is 44° F., that is, 5° lower than here. Venice, "the City of the Dead," whose palaces look like funeral vaults, and whose far-famed gondolas, sombre, black, and uniform as they are, remind one very much of coffins, is not sufficiently enlivened by the doings of the Austrian police to present many attractions to invalids, who are generally apt to fall into a very lugubrious strain of mind on the "Bridge of Sighs." The medium temperature of winter in Venice is 37°, that is, 12° lower than here. In Rome, the difference in the temperature of morning, noon, and evening, and in sunny and shady places, is exceedingly great. Consumptive patients, when visiting the churches and palaces, often fall ill in consequence of the cold, cellar-like air they inhale in these buildings, and which forms a great contrast to the atmosphere outside; besides which, even in the more healthy months, pernicious intermittent fever now and then occurs. The medium temperature of winter in Rome approaches nearest to that of this city, being 46° F., that is, only 3° lower than here. Palermo is, undoubtedly, in a mere climatic point of view, the best of all Italian health-resorts for consumptive patients, as the medium winter temperature is 3° higher than here (52° F.), there is very little draught, and a great many pleasant and sheltered walks. The only drawback is, that there are few domestic comforts, very indifferent pharmacies, and only native Physicians.

For consumptive patients, who intend to winter here, the choice of a good lodging is of the greatest importance. They ought to go exclusively to the southern part of the town. In this, the Strada Santa Lucia is inhabited by many foreigners on account of the charming view it presents of the gulf; but it is much exposed. The suburb Capo di Monte is also often recommended, but this is dangerous during winter on account of its dampness; and the Strada Santa Teresa, San Pasquale and Santa Maria in Portico, which are more sheltered and dry, are therefore preferable.

I have seen many consumptive patients derive great benefit from a stay here; but it is true that some of them verify the old proverb,—"See Naples and die." These are generally patients in the last stage of phthisis, who had much better have remained at home; but it is well known that sometimes even the most urgent representations of their Medical attendants are not able to induce such patients to bow quietly to their fate; and they cling to a journey south as the last hope. Such patients ought to avoid Naples all the more, as this disease, in its colliquative stage, is believed to be contagious, and they are, therefore, often exposed to painful annoyances. If a patient has died of consumption in an Hospital all his appurtenances, with the only exception of watches, money, jewellery, etc., are destroyed, and the room in which he has breathed his last is entirely renovated. Every combustible part of it is burnt and replaced by entirely new matter; the walls are newly distempered or papered, the doors and windows newly painted or grained, and even the stones of the floor are removed. In short, a work of destruction is commenced, as it could not be more thorough in the worst cases of plague. This superstition as to the contagiosity of phthisis is not confined to the people, but also shared by Medical men, who ought to know better.

Consumptive patients who also suffer much from the liver, ought not to come here, as they seldom derive any benefit; but such with abundant expectoration are very much improved, Naples being nearly as dry as Cairo. The same may be said of those who have a disposition to hæmorrhoids, as not unfrequently spontaneous hæmorrhoidal bleedings set in here with simultaneous relief to the chest.

Naples is very falsely believed to be much visited by tuberculosis. This belief arises merely from the fact that the native Physicians are not quite as far advanced in the physical examination of the chest as their German, French, and English colleagues; a great many cases are, therefore, declared to be such of phthisis, which are really cases of bronchial catarrh, emphysema, and heart-disease. In a certain part of the Ospedale Degli Incurabili (Hospital for Incurables) you find over every bed the written diagnosis "Tisi" (consumption), but every student who has walked the Hospitals of Vienna, Berlin, Paris, or London for six months, would be able to show the fallacy of this diagnosis. If a patient comes into the Hospital and states that he has for the last few weeks suffered from cough, he is at once put down as consumptive; and we cannot therefore be surprised at the excellent curative results said to have been obtained by the Physicians of this Hospital, who, out of 200 cases of tuberculosis, entirely cured fifty! The sad condition of diagnosis is rendered even more evident if we cast a glance at the other beds; there we find such diagnoses as "pain," "icterus," "palpitation of the heart," "tumour," "fever," "diarrhœa," etc.! The native Doctors are very comfortable in their belief that the progress of Medical Science abroad, especially in France, Germany, and England, has no influence whatever upon Neapolitan Medicine, the climate of Naples being so very peculiar; and they are very slow to divest themselves of prejudices which even the oldest Practitioners in Cornish or Bohemian villages would scorn. It is so much the more to be acknowledged that Dr. Manfré, certainly the most accomplished of the native Physicians resident here, who has visited England, France, Holland, Belgium, and Germany, and who is Editor of the Medical Journal *Severino*, has for some years past given clinical instruction according to the pattern of the German Universities. In his wards a real diagnosis of diseases, and not of symptoms merely, is given. Signor Manfré's clinique is in the University Hospital, in which there are also surgical, ophthalmological, and obstetrical cliniques. The

University itself is one of the oldest in Europe, having been founded in 1224 by the German Emperor Frederic II.

SURGERY IN NAPLES.

Surgery is far more advanced in Naples than Medicine. Professor Palasciano, the most eminent Surgeon of this city, can scarcely be said to yield to English, French, and German Surgeons, if we except his extraordinary prejudice against chloroform, which he believes to be incompatible with the climate of Naples. He is a staunch adherent of ether, and has his patients etherised even if he only intends probing a wound; he says that he has never had a case of death in consequence of etherisation. This does, however, not prove that ether is entirely innocuous. I believe that Professor Langenbeck, of Berlin, who, perhaps, of all European Surgeons is the one who has made most operations on patients under the influence of chloroform, has never had a case of death from it; and, nevertheless, we all know that chloroform sometimes kills in spite of all precautions. Professor Palasciano employs two drachms of ether in a silken bag, the bottom of which is covered by linen, and which is put on the face of the patient so that only his forehead remains free. If two drachms are not sufficient to induce anæsthesia, the same dose is repeated, and an ounce will always effect the desired result. Professor Hayward, of Boston, who on November 6, 1846, performed the first surgical operation on a patient under the influence of ether, was here in 1858, and on witnessing Professor Palasciano's method of narcotising patients, entirely approved of it. Those of your readers who wish for some more information on this subject, will find it in "Palasciano's Memorie ed Osservazione di Chirurgia Practica." (Naples: 1858.)

The Surgeons here have great dexterity in performing lithotomy (lateral section). Regarding obstetrics, I may mention that the Cæsarean section is believed to be a necessarily fatal operation; and if foreign Physicians point to the favourable results obtained by it abroad, they are given to understand that the cases described are fictitious!

EPIDEMIC AND ENDEMIC DISEASES.

Epidemic and endemic diseases are of rare occurrence here. If intermittent fever, which devastates Rome and its neighbourhood, is observed in this city, it has generally been contracted at some other place; the same may be said of typhoid fever. Cholera was here in 1854 and 1855; but at that time there was scarcely a place in Europe spared by this scourge. The eruptive fevers, especially measles and scarlatina, are very mild, and scarcely ever attended with dangerous complications. Whooping-cough is also scarcely to be called a disease in this city, and we only seldom hear of the death of a child by diphtheria. Pneumonia and pleurisy are almost always devoid of danger, unless too much tampered with. Acute rheumatism of the joints is a *rara avis;* and syphilis, in patients coming from the North, is generally speedily improved or cured. From all this, your readers may therefore perceive, that Naples is not such a very bad place to live in as your cotemporary would have us believe.

GERMANY.

Berlin, July 29.

THE PRUSSIAN SYSTEM OF EXAMINATION.

Your Breslau correspondent has already, in one of his able letters, drawn attention to a recent rescript of the Ministry, which although at first sight it may not appear of much consequence, will no doubt essentially change the course of Medical study in Prussia. I think this subject sufficiently important to revert to it once more, and at the same time to use the opportunity for giving your readers an insight into the whole system of Prussian Medical Examination. Up to the present time the first two years of Medical study have been devoted to anatomy, physiology and the natural sciences, viz., botany, mineralogy, physics, chemistry and zoology; besides which lectures on logics and psychology had to be attended, and at the end of that term an Examination in these subjects was held. The Professors who teach the natural sciences and metaphysics, are not members of the Medical, but of the Philosophical Faculty. In Prussia as well as in the other German states, there are no separate Medical Schools, but Medicine is one of the four Faculties, of which every University consists; and the natural sciences, as preparatory to the study of Medicine, are taught in the same buildings in which the lectures on divinity, law, philosophy, history, etc., are given. The only exception to this rule is anatomy, for which a special building exists; but the young Medical Student is only separated from the University at the moment when he enters the cliniques; and even then many still continue their attendance at philosophical lectures. Four years after the commencement of these studies, and two years after the Philosophical Examination has been passed, the Student undergoes the so-called rigorous Examination, which is quite theoretical, and in which anatomy, physiology, pathology and therapeutics, Medical jurisprudence, Surgery, and obstetrics are gone into. This passed, the Student obtains the title of Doctor. Finally the so-called State-Examination is held, which is almost entirely practical, and which takes place in the dissecting-room and at the bedside. If he passes through this last and most difficult ordeal, the Doctor is regularly qualified and may begin practice. These Examinations, especially the mode in which they succeed each other, have many inconveniences, to which I shall revert on another occasion. At present I shall confine myself to discussing the new rescript, which says that an Examination shall no longer take place in logic, psychology, botany, mineralogy and zoology, but that the Professors of physics and chemistry shall be the only Examiners, and shall henceforth belong to the Medical Faculty.

It is obvious, that this rescript touches a matter of the last importance. The Medical student is henceforth to be limited to Medicine exclusively, and must not fritter away his time and powers on heterogeneous subjects; it is, however, easy to see that by this measure the philosophical basis of which the German Physicians have until now been so proud, will be destroyed. Students always turn the greatest attention to those subjects in which they will be examined afterwards, and they are scarcely to be blamed for this, as the examination embraces those matters which are deemed by the State to be the most important for the Medical Practitioner. The immediate consequence of the rescript will, therefore, be, that the young Medical man does not acquire anything in botany, mineralogy, zoology, logic and pyschology, beyond the vague and indefinite notions which he may have imbibed in the gymnasium. Although the rescript will only come in force next session, it has even now had a great influence, as only very few Medical students have lately attended lectures on natural sciences and metaphysics. We cannot suppose that the Ministry of Medical affairs can really be of opinion that an accomplished Physician can be formed by merely making post-mortem examinations and attending cliniques. No doubt natural philosophy and metaphysics have until now held too prominent a place in the education of the Medical Practitioner, but it would not be difficult to have these lectures given in such a manner as should render them of special interest and use to the Medical student, and to appoint Professors who will not trouble their pupils for months with the measurement of the angles of certain crystals or the details of the position of leaves, or who only give superficial notes on the life and customs of animals, but who may in an interesting manner give an insight into the general forms of natural objects and the laws of inorganic and organic nature. The Ministry probably intended to improve a desultory method of teaching, but they have certainly overstepped the mark in entirely doing away with philosophy and natural sciences; and the Medical profession of this country is quite justified in considering the rescript in question ill-advised and unintelligible. It is to be hoped that the Ministry will not be silent on the subject, but will condescend to give us some explanations of this at present wholly unaccountable proceeding. It is believed that other changes in Medical study and examination will soon follow.

The examinations for the degree of Doctor of Medicine in Germany certainly require some reform. Not only do some of the small Universities give degrees *in absentia* with little hesitation, but even in Prussia this examination might be more rigorous. The real gauntlet the future Medical Practitioner has to run, is the so-called State Examination, in one or other stage of which two out of three candidates are plucked. The title of Doctor cannot be a great honour if its possessor, as such, is not legally qualified to practise, and may be plucked in subsequent examinations. In 1848,

when the necessity of reform in Medical as well as in other affairs became strikingly apparent, although it was expressed in a somewhat rough and impetuous manner, it was frequently recommended, that the degree of M.D. should, as is already the case in some of the minor German States, only be given at the end of all examinations. It might then be left open to every one to obtain the degree or not, and the title would certainly gain in social significance when more difficult to procure.

THE PUBLIC HEALTH.

The state of public health has been very favourable here during the whole summer. Although measles continually prevailed since last autumn, so that only very few families with children between three and nine years of age have been spared, most cases have been of a very mild character; and very few malignant complications or deaths have occurred. Hæmorrhagic measles were very rare; varicella was rather frequent, and scarlet fever occurred sporadically. A few cases of choleraic diarrhœa, caused more by faults in the diet than by epidemic influences, and some of typhoid fever of simple course, complete the register.

Wiesbaden, July 28.

WIESBADEN IN DISEASES OF WOMEN.

Although male patients suffering from rheumatism and gout, form by far the largest proportion of visitors to our thermal springs, these are often prescribed in specific diseases of women and in such complaints as are common to both sexes but more frequently occur in females and in which they have a very marked effect. To the former belong disturbances of the function of the uterus, anomalies of menstruation, fluor albus, sterility; to the latter diseases of the liver in consequence of disturbed circulation, etc.

Females are more subject to considerable periodical and extraordinary variations in the circulation of the blood and to the congestions consequent upon them, viz. hyperæmia and hypertrophy of the liver, icterus, gall-stones, etc., than males. The Obermedizinalrath, Dr. Müller, the most eminent Physician of this place, has had 220 cases of this kind under his care in which the thermal springs of Wiesbaden have been used. These diseases most frequently occur in decrepit females, but they are also observed in women in the prime of life, and not rarely in sterile women, who at the same time suffer from hæmorrhoids. Parturition and nursing are physiological processes which, unless dyscratic disorders or deformities should be present, promote the health of mothers. Dr. Müller has noticed that among all his female patients, those had conserved their good looks and health the longest who had had a considerable number of children (ten to eighteen) and had nursed all of them; while women who were either sterile or had had only one or two children, suffered not only from the various forms of hysteria, but also from other more formidable complaints at an early period of their lives. If the power of production inherent to women is not allowed to be developed at all, or only in a trifling degree, abnormal productions are the consequence, swellings, tumours of the organs of generation, and irritation of the nervous system.

The same Physician has had 175 sterile women under his care, who came here not for the purpose of remedying sterility, but in order to get rid of other sufferings. An examination of the genitals was allowed in 102 cases. In some of these menstruation had never been present, nor had there been any local sufferings or vicariating symptoms; in others, the catamenia had been extremely irregular. In a few the introitus of the vagina was closed by thick membranous adhesions. In two such instances the patients had refused to have these membranes divided, and in a third a celebrated Surgeon had divided them, but during cicatrisation the adhesions again united, and became firmer than before, after which the patient refused to have another operation performed. In other patients Dr. Müller found displacement of the uterus, the fundus being directed forwards and the cervix backwards towards the sacrum; hypertrophy and hardness of the cervix and narrowness of the external os; in one case the cervix showed true atrophy, it being thin and smooth. Chronic ovaritis with swelling of both ovaries and irregular menstruation and hypertrophy of the whole womb were also observed. In some women no such local causes of sterility were to be found, but the genitals were cool, and even cold, and there existed an indifference or aversion to connexion, and anæsthesia of the generative organs. In one patient who had been married fifteen years, metro-vaginitis had come on soon after marriage, after which she suffered from considerable varices of all subcutaneous veins of the thighs, a less copious menstruation and sterility.

Wiesbaden's springs cannot be said to render women generally fertile, as Ems is believed to do. But in some cases of sterility which came under Dr. Müller's notice, conception has certainly taken place after the use of these waters. A woman who had been married for sixteen years without having had any children, came to Wiesbaden for rheumatism which had successively attacked all parts of the body, and chronic diarrhœa. After the thermal springs of this place had been used for some time, the steel springs of the neighbouring Schwalbach were prescribed, and nine months afterwards a daughter was born, who has remained the only child. Another lady who had been married for nine years, came here for chronic rheumatism, which had tortured her scrofulous body for a very long time; the catamenia were regular, but the internal exploration showed a soft swelling of the uterus. After the springs had been used for some time, it regained its normal condition, and the rheumatism disappeared. In the course of the following year the husband informed Dr. Müller that soon after the lady had left here, conception had taken place and a daughter had been born. A woman who had been married seven years and suffered from chronic ovaritis, took first the waters of Wiesbaden, and afterwards those of Kreuznach; the swelling had then entirely disappeared, she conceived soon afterwards and gave birth to a living boy.

Thermal springs may render women fertile, if they remove the causes of sterility. The ascending douche may perhaps be of use in cases where there is deficient innervation; but it is difficult to believe that it should act more efficiently than the natural stimulus. While, in cases of this kind, the vagina is little or not secreting, on the other hand, many sterile women suffer from fluor albus. When the chronic catarrh of the vagina has lasted for some time, and has been so violent that the mucous membrane has become relaxed, and procidentia or prolapsus of the anterior wall of the vagina has taken place; when the secretion has become very copious and thick, yellow or greenish, the catarrh becomes not only troublesome, but also detrimental to the whole system. This affection is often caused by venous stasis in the pelvic organs, good living and little exercise. Baths of low temperature have chiefly been used in such cases by Dr. Müller; and those parts of the vagina which secreted most were cauterised by him with nitrate of silver. The baths at first augmented the catarrh, as they excite all secretions; but after they had been continued for some time, they removed the causes of the disease. A very obstinate case in a sterile lady required 150 baths, given with interruptions; but a complete cure was the result.

Bonn, August 3.

ON GLANDULAR SARCOMATA OF THE NECK.

M. Busch, Professor of Clinical Surgery at this University, recently gave the Society of the Lower Rhine an account of his experience on the extirpation of glandular sarcomata of the neck. As these tumours grow rapidly, and cause many inconveniences, which often increase in a short time to such a degree as to endanger life, the Surgeon finds himself frequently called upon to proceed to the removal of these neoplasms, especially as in most cases every other treatment save the operative one fails. A complete extirpation of them is, however, connected with great difficulties, chiefly if such tumours have their origin in the neighbourhood of the large bloodvessels of the neck, from there extend to every side, and at last completely dislodge all surrounding tissues. Professor Busch has, in several such cases, been compelled to leave some remains of the growth behind, in the hope that they might be destroyed by suppuration. In one case of this kind the part which had been left behind really disappeared under this influence; but this fortunate issue does not always take place; on the contrary, the remains sometimes rather generate a new and rapid growth of the tumour, with fatal result. The experienced Surgeon is, therefore, never very eager to operate in such cases.

Quite recently, a patient suffering from a glandular sarcoma in the right trigonum Colli inferius placed himself under the care of Professor Busch: he was of a very vigorous constitution, in favourable circumstances, and in the prime of life. In consequence of tapping, which had been performed before, this tumour had grown so much that the larynx was dislodged beyond the median line towards the left side. The patient was fully aware of the danger with which he was threatened by the tumour as well as by an operation; but he was firmly resolved to run the risk of the latter. Professor Busch, encouraged by a communication from Professor Langenbeck, of Berlin, who had recently tied the carotid artery and the internal jugular vein both below and above a tumour of this kind, and had excised that portion of the vessels lying between, with favourable result, was induced, by the urgent request of the patient, to undertake the operation, so much the more as he had recently extirpated the whole scapula in a girl in very indifferent health, and under far less favourable circumstances, with success.

The operation was commenced with an incision along the sterno-cleidomastoid muscle; and the platysma and part of the muscle just named were removed. The tumour was then prepared upwards from its lower extremity below the clavicula between the arteria and vena subclavia, and carefully separated from the larynx and the large blood-vessels from inwards. While an assistant held back and protected these vessels, which were now lying bare, the tumour was separated from the sheath. A white, thick cord was then perceived, which entered, forwards and inwards from the blood-vessels, into the middle of the tumour; and this was believed by all those present to be the ramus descendens hypoglossi, the sheath of which was supposed to have thickened. From its situation, it could scarcely be another nerve; and if the tumour was to be removed at all, the section of this nerve was imperative. After this had been done, Professor Busch proceeded to separate the tumour entirely from the internal jugular vein, close to its entrance into the V. subclavia. The vein was, in this stage of the operation, slightly incised, and for a moment some air entered it; but it was immediately compressed and tied by Professor Weber. In the meantime, however, a sudden change came over the aspect of the case. The patient, who had until then borne the operation extremely well, collapsed suddenly; the voice lost its sound, the pulse became exceedingly quick, the respiration impeded, and, by the ear as well as by the hand, one was able to recognise the existence of an œdema of the lungs, evidenced by râles which were distinctly to be heard and felt. At the same time the patient became completely insensible. Under these circumstances, the operation was not continued, as the patient was obviously in the greatest danger. The respiration became more difficult and fluttering every minute, the vocal cords were heard rattling to and fro with the expired and inspired air, and tracheotomy seemed to be the only chance, however insecure, to save the life of the patient. This operation was, therefore, forthwith done, and a quantity of bloody and frothy serum sucked out of the windpipe by the mouth. This greatly relieved the breathing, which had until then only been effected by the extreme exertion of all the respiratory muscles. Still the sopor continued, and convulsive movements of the muscles of the neck and the right arm, and after some time also of those of the right leg, came on. By repeatedly sucking out the serum which continually accumulated in the windpipe, the Surgeons gradually succeeded in improving respiration so far that the patient recovered his consciousness, when he, in a hoarse whisper, asked for something to drink. But this improvement was only temporary; œdema of the lungs and of the brain, as well as the convulsions just mentioned, went on increasing, and death took place sixteen hours after the operation.

Although at first the symptoms observed were believed to be due to the trifling amount of air which had entered the vein, it very soon became evident that this could not be the cause of them, as the patient would then, no doubt, soon have recovered. The voice, which had quite lost its *timbre*, the difficult respiration, and the acute œdema of the lungs, rendered it very probable that the white cord, which had been cut through, was not the ramus descendens hypoglossi, but the vagus, and the post-mortem examination was looked forward to with great excitement. This was made by Professor Weber with the utmost care. As regards its situation, this nerve could even then scarcely be believed to be anything else but a branch of the hypoglossus, as it was quite outside the large vessels, in the middle of the tumour, and drawn forwards and inwards. It was not until the cord was laid bare to its exit at the upper angle of the trigonum Colli that it became evident that it was really the vagus, which had been cut below the branching off of the superior laryngeal nerve. The carotid artery was quite normal, but the internal jugular vein was drawn forwards, and thus imbedded in the substance of the tumour that it could not escape being cut through. After the tumour had been removed, the vertebral column, the sympathetic nerve, and the cervical and brachial plexuses appeared laid bare, as if they had been carefully prepared. Besides, the post-mortem examination showed a considerable hyperæmia of the veins of the brain and œdema of the cerebrum. The lungs were also overfilled with blood and serum.

This case was altogether one of the greatest interest. It showed at first, that, even if the Surgeon is thoroughly conversant with the normal anatomy of the neck, such knowledge does not help him if he extirpates tumours of this kind; so that the well-known saying of Dieffenbach, that anatomy was of no use whatever to the Surgeon, but rather tended to embarrass him, did in this instance not appear unjustified. The result obtained is no doubt very discouraging, as the operator, by feeling himself uncertain and on dangerous ground, looses the security so necessary in operating. The greatest care is no shield against such errors if the Surgeon wishes to complete the operation; and we must, therefore, be very reluctant in removing tumours which are adherent and not easily to be displaced.

Another question is, how it came to pass that the anatomical relations of the parts should have been thus changed. Such dragging out of the vagus from its protected situation and displacement of the internal jugular vein can only be explained if we assume that the neoplasm also affects the common sheath of the vessels, and that within this the tumour continues to grow, and thus displaces the parts enclosed within the sheath. In the present instance the symptoms which followed the section of the vagus were of the greatest physiological interest, as they showed that even the section of one vagus only will in man soon cause death, which in animals only ensues when both vagi are cut. The extraordinary acceleration of the pulse and the spasmodic contractions of the muscles of the extremities were very striking

A discussion ensued afterwards concerning the possibility of curing such tumours by other than operative proceedings. Professor C. O. Weber related a case in which a glandular sarcoma below the lower jaw, of the size of a fist, in a young man had become entirely atrophied by the persevering use of cod liver oil internally and ointment of iodide of potassium with iodine externally, although the tumour pressed so strongly upon the superior laryngeal nerve that the patient was completely hoarse, and at times could only whisper, and a further growth of the tumour would evidently soon have caused death. It is just these tumours in which fatty degeneration very frequently occurs, this being the only chance for the patient's safety. It is greatly to be regretted that we are not yet able to bring about fatty degeneration *ad libitum* with any degree of certainty.

Königsberg, July 25.

DISEASES PREVALENT IN KÖNIGSBERG.

In your leader of June 15 on the death of Count Cavour, you expressed some misgivings whether the constitution of the Italians and the climate of their country did not require a medication different from that generally pursued in the North. It is not my intention to discuss this point theoretically, but I believe that we may approach the solution of such and similar questions if all your correspondents in the different parts of Europe continue to give an account of the general type of disease, and the results of the treatment in those domains over which they individually preside. I will therefore follow in the wake of my colleagues of Bonn, Breslau, and Rome, and contribute an account of the character of diseases prevalent here, which, considering the circumstances, is rather favourable. The soil being damp, there is much malaria, but its malignant forms are very rare; other endemic

diseases, with the exception of a deplorable disposition to diphtheritis, especially of the larynx and the eyes, do not exist.

Croup ranks first amongst the most dangerous enemies of our children; it swells the bills of mortality to a terrible degree. According to statistical tables drawn up by Dr. Bohn, there died of it, within the last twelve years, on the average, 4½ per cent. of all deceased in this city. It is therefore not surprising that Paterfamilias is terribly alarmed on perceiving the slightest hoarseness in any of his infants. Except acute hydrocephalus, which is always fatal, there is no more dangerous infantile disease than croup. In 50 cases accurately observed and correctly diagnosed, 38 died, that is, 3 in 4 of all those affected. Although croup is endemic with us, the number of those suffering from it shows great variations; and twice in the course of the last twelve years there have been veritable epidemics of it. What the influences may be which cause the greater or less frequency of this disease we have, in spite of many careful observations, not yet been able to determine. Neither the season of the year, nor the state of the thermometer or barometer, nor the direction of the wind, nor the dampness of the air, have shown any constant influence. As is generally the case, strong and healthy children, especially boys, are mostly affected; and in many cases a very bad addition to the disease has been a well-authenticated contagiosity of it. Frequently brothers and sisters have been affected and have died one after the other; or children in different apartments of the same house fell ill in rapid succession. The post-mortem examinations, which are of only too frequent occurrence, have always shown fibrinous exudation, either in the larynx or in the trachea, or in both; it is generally a real membrane differing according to size and extent; but while in the upper part of the air-passages the inflammation of the mucous membrane is inconsiderable or even wanting, the anatomical peculiarity of the inflammation becomes the more apparent the deeper we descend. A general bronchitis, with tough yellow exudation filling up the bronchial tubes, has been the constant phenomenon observed by Dr. Bohn in the post-mortem examinations of children, made in the Hospital. This gentleman is of opinion that the real cause of death in these cases is not the trifling exudation in the upper part of the air-passages, but the additional bronchitis, and in some cases, broncho-pneumonia. The duration of the disease varies from twelve hours to ten or eleven days. Deceptive intermissions are frequent. The respiration and the pulse often become more tranquil, the hoarseness less marked, and the peculiar respiratory murmur incident to croup, scarcely audible. The child is evidently better, and the Physician is induced to form a more favourable prognosis; but a few hours afterwards all symptoms return, increased for the worse, and death takes place. The *partie honteuse* of our experience regarding croup is therapeutics; no method of treatment has given good results. Everything has been tried,—leeches, blisters, mercurial ointment in abundance, cauterisation of larynx and pharynx; internally, calomel, emetics, carbonate of soda, etc., and all have failed. Tracheotomy performed in an early or late stage of the disease, has only resulted in euthanasia.

The report of diphtheritis of the eye is scarcely more favourable. Excepting A. von Graefe, Professor Jacobson, of this University, is the only one who has published a large series of cases of this disease; another sad preference of this town! Within five years the Professor has observed forty-four cases of sporadic, and twenty-two of epidemic diphtheritis of the conjunctiva; while Mr. Hutchinson in the Ophthalmic Reports for October, 1859, has, among a large number of cases of eye-diseases, described only one of diphtheritis! This disease is either primary, or it associates with other pathological conditions of the conjunctiva already in existence. Regarding prognosis, according to Dr. Jacobson, everything depends upon the circumstance whether the diphtheritic affection is sporadic or epidemic. All sporadic cases end favourably, while those which appear epidemically, have generally very bad consequences. Among 22 eyes affected by the latter form, in 17 individuals, 5 were entirely destroyed, in 4 adherent leucomata remained, and vision was tolerable afterwards, in 6 cases the cornea suffered loss of substance, and more or less intense obscurations remained. In 4 cases the cornea was not affected, in 3 the diphtheritic keratitis effected a lighting up of old pannous obscurations.

The symptoms of the disease having been so well described by Dr. A. von Graefe and Dr. Jacobson, the Surgeon ought to be very careful in making the differential diagnosis of the inflammation of the conjunctiva, as the treatment must be greatly different in the several forms of this affection. A patient may suffer from catarrhalic conjunctivitis, or from old trachoma, or from chronic blenorrhœa, and cauterisation may seem to answer very well. Suddenly the aspect of the case becomes very much worse, and the patient complains of excruciating pain. The lids swell greatly, the eye is closed, and it may be thought to be a case of acute blenorrhœa; but the swelled lids are tight and hard, like a solid body; the conjunctiva, strongly tumefied, does not show any traces of hyperæmia, but appears pale, grey, or even yellow. Besides, we have generally a rapid necrosis of the cornea, from which whole pieces may almost be said to come away. Such are cases of rapid and extensive infiltration of the whole sac of the conjunctiva, with diphtheritic exudation; there is no increase of the quantity of the blood, but the circulation is almost entirely suppressed, and thence the danger to the cornea and the whole eye. Concerning the treatment, cauterisation is to be entirely proscribed. If the hyperæmic and blenorrhoic conjunctiva be cauterised, the exudation and the hyperæmia of the vessels of that membrane are diminished; but there being no such hyperæmia in diphtheritis, there is, of course, no exudation, and if the eschara is allowed to remain, it only contributes to still further suppress circulation, which has already been greatly enfeebled. Dr. Jacobson especially recommends the energetical application of cold, which he applies by means of compresses cooled by ice; but I think that the mode of application recommended by M. Esmarch, by means of gutta-percha bags filled with ice, is preferable. Besides, he advises, contrary to the opinion of Professor A. von Graefe, deep incisions for diminishing the pressure exercised upon cornea and conjunctiva. The immediate relief which is experienced after these incisions, and which lasts for several hours, seems to render this advice certainly worthy of attention.

GENERAL CORRESPONDENCE.

TREATMENT OF PLACENTA PRÆVIA.

LETTER FROM DR. RADFORD.

[To the Editor of the Medical Times and Gazette.]

SIR,—Knowing your readiness to assist in the settlement of all practical Medical questions, I now respectfully request your kind co-operation to obtain statistical data on a most important obstetric subject—viz., the practice adopted in cases of placenta prævia, which, from the various opinions now entertained by the Profession, must be considered as debatable and unsettled—some advocating one line of practice, some another. It it well known from my former papers in the *Medical Times and Gazette* that I recommend (conditionally) the placenta to be entirely detached.

As the statistics of this practice, either in accordance with my own views or with those of others, are, however, so limited in comparison with the statistics of the other modes of practice which this operation is intended to supersede, I, therefore (through your valuable publication), appeal to the general Profession to aid me in more fairly estimating its comparative merits.

Those who kindly comply with my request will much oblige me by stating the case or cases according to the suggestions below, and by granting me the privilege of using them for statistical purposes. The name of each contributor shall be inserted in connexion with each case (when tabulated) if such a course is approved of by him.

I am, &c.

THOMAS RADFORD, M.D.

Higher Broughton, Manchester.

P.S.—The following particulars are required:—1. The number of cases of placenta prævia; 2. Whether partial or complete; 3. What was the state of the os uteri; 4. What the general condition of the patient; 5. What was the degree of hæmorrhage; 6. What the presentation (if ascertained) of the child; 7. What was the mode of practice. Was it (*a*) to leave the case to the natural powers; (*b*) to merely rupture the membranes, and then leave the case to Nature;

(*c*) to turn, and deliver the child; (*d*) to completely detach the placenta, and then leave the child to be expelled by the uterus; (*e*) to completely detach the placenta, and then extract it, and afterwards deliver the child; (*f*) was the placenta separated or detached by the hand or by a finger; (*g*) what was the degree of hæmorrhage which occurred after the complete detachment of the placenta; (*h*) what was the mother's fate; (*i*) what was the child's fate; (*k*) was galvanism applied; (*l*) at what period of pregnancy, and if first or which other pregnancy?

CONSULTATION WITH HOMŒOPATHS.

LETTER FROM MR. FERGUSSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—The explanations I offered, in my letter of the 20th of July last, published at page 89 of your present volume, regarding my alleged communion with Homœopaths, not appearing satisfactory to the Profession, I beg to state that *for the future I shall feel it incumbent on me to decline any meeting, or so-called consultation, with Homœopathic Practitioners.*

Enjoying a large share of Professional confidence, and holding various important public appointments, I should consider myself unworthy of such honours were I, at the present time, to offer any objections to the expressed wishes and declared opinions of my Professional brethren.

I am, &c.

WM. FERGUSSON.

16, George-street, Hanover-square, W.
August 12.

WHO ARE PHYSICIANS?

[To the Editor of the Medical Times and Gazette.

SIR,—The assumption in recent years by the holders of Medical Degrees of the designation "Physicians" has now become so general, that it is high time the legality of such a prevalent custom should be finally settled by severe high judicial determination and authoritative *dictum*. The impression that they are convertible terms would seem erroneous, as the fortieth section of the Medical Act treats them as distinct and different titles; and if this be so, persons who have incautiously used the name "Physician" without other warrant than that conferred by the diploma of a Scotch, Irish, or foreign University, may find themselves exposed to the penalties inflicted by the section of the Act to which we have referred. On a recent occasion, one of the Judges of the Courts at Westminster, when speaking of the construction of that section, expressed his opinion thus:—"If any person wilfully and falsely called himself a Doctor of Medicine, he would be liable to a penalty, although he was in reality a Member of the College of Surgeons, or of the Apothecaries' Company, and was so registered." This language would equally apply to any person actually calling himself a Physician who merely held the degree of Doctor of Medicine in one of the Universities in question. Graduates of Oxford and Cambridge must not, however, be erroneously confounded with those of the other Universities, as they are legally entitled to practise Physic by virtue of the reservation in their favour contained in prohibitory Acts of Parliament which were in force throughout England prior to the Medical Act of 1858. The diploma in Medicine which the Universities of Scotland and Ireland confer, seem not to comprise Surgery, while Physic has been expressly declared by Act of Parliament to contain Surgery. It would therefore appear essential for the Physician that he should be possessed of a legal qualification which enables him to practise Physic, and that, unless a person can practise Surgery as one branch of his Profession by virtue of some other authority than that conferred by some College of Surgery, he cannot properly describe himself as a Physician. The distinction is not merely nominal, since it enters largely—more largely than is generally supposed—into various rules which regulate the Profession; and any improper adoption of the designation, involves civil and criminal liabilities, which we need not at present attempt to describe. Therefore, I think that some steps should be taken to clear up the doubts in which this question seems to be now involved; and until this be done, Practitioners will do well to limit the use of Medical titles and designations to those they have actually registered.

I am, &c.

M D. AND F.R.C.P.

London, July 15.

MEDICAL NEWS.

LIST OF ENTRIES IN THE LOCAL REGISTER FOR ENGLAND, FROM JUNE 29 TO JULY 31, 1861:—

Date of Registration.	*Name.*	*Residence.*	*Qualification.*
July 16	Allen, J.	Bollington, near Macclesfield, Cheshire	M.R.C.S.E. 1861
July 27	Armstrong, W.	Assist.-Surgeon, 87th Regiment	L.R.C.S.E. 1858
July 17	Bellamy, G.	Assistant-Surgeon, Royal Navy	M.R.C.S.E. 1859
July 8	Birnie, T. K.	Staff Surgeon, Army	L.R C.S.E. 1849
July 29	Blake, T.	Askern, near Doncaster	L.S.A. Lond. 1855; M.R.C.S E. 1855
July 18	Bogg, T. W.	Louth, Lincolnshire	M.R.C.S.E 1861; L.S.A. Lond. 1861
July 8	Cann, F. M.	Guy's Hospital, London, S.E.	M.R.C.S.E. 1860; L.S.A. Lond. 1860
July 8	Carter, D.	Surgeon, Royal Navy	M.R.C.S.E. 1845; L.S.A. Lond. 1845
July 18	Clay, R. H.	Assistant-Surgeon, Army	M.D. Univ. Edin, 1857; L.R.C.S E. 1857
July 9	Courtney, C. F. A.	Surgeon, Royal Navy	M.R.C.S.E. 1847; L.S.A. Lond. 1847
July 8	Crutchley, H.	Mansfield Woodhouse, Notts	L.R.C.P. Lond. 1861; L.S.A. Lond. 1861
July 1	Deane, R.	York-street, Clitheroe, Lancashire	L.S.A. Lond. 1828
July 10	Dinham, G. J.	Mile-end, London, E.	M.R.C.S.E. 1860
July 27	Dunwoodie, J.	Assistant-Surgeon, Royal Navy	M.R.C.S.E. 1855
July 8	Eccles, E.	Longridge, near Preston, Lancashire	M.R.C S.E. 1860; L.S.A. Lond. 1861
July 13	Evans, T.	Britou Ferry, Glamorganshire	M.R.C.S.E. 1858; L.R.C.P.E. 1860
July 2	Fernie, W. T.	Hursley, near Winchester, Hants	M.R.C.S.E. 1854; L.S.A. Lond. 1854
July 2	Fisher, J.	Assistant-Surgeon, Royal Navy	L.R.C.S.I. 1853
July 15	Fothergill, S. A.	Melbourne, Australia	M.R.C.S.E. 1861
July 24	Fyffe, B.	Queensland do.	M.R.C S.E. 1860
July 18	Gaye, A. C.	Assist.-Surgeon, 4th (King's Own) Regt.	M.R.C S.E. 1859; L.S.A. Lond. 1859
July 22	Goldin, W. G.	Surgeon, Royal Navy	M.R.C.S.E. 1841; M.D. Univ. King's College, Aberdeen, 1851
July 8	Goodall, J.	Wistanswick, Market Drayton, Shropshire	M.R.C.S.E. 1858
July 25	Greenwell, B.	Finchley-road, St. John's-wood, London, N.W.	M.R.C.S.E. 1861; L.S.A. Lond. 1861; M.D. Univ. St. And. 1861
July 24	Hall, A. R.	Fort Pitt, Chatham	M.R.C.S.E. 1860; L.S.A. Lond. 1860
July 8	Harland, H.	Mayfield, Sussex	M.D. Univ. St. And. 1861; M.R.C.S.E. 1861; L.S.A. Lond. 1861
July 18	Haward, W.	Staff Assist.-Surgeon, Army	M.R.C.S.E. 1854
July 16	Hawkins, T. H.	Royal Ophthalmic Hospital, Moorfields, Loudon, E.	M.R.C S.E. 1859; L.S.A Lond. 1859
July 12	Henderson, A.	Towlaw, Darlington, Durham	L.R.C.S.E. 1855
July 25	Henry, J.	Surgeon, Royal Navy	M.R.C.S.E. 1841
July 16	Kernot, G. C.	3 and 4, Chrisp-street, and 5, Suffolk-terrace, Upper North-street, Poplar, London, E.	L.S.A. Lond. 1861
July 10	Lanchester, H. T.	Norwich, Norfolk	M.R.C.S.E. 1861; L.S.A. Lond. 1861
July 25	Langworthy, W. F. jun.	Brook House, Modbury, Devon	M.R.C.S.E. 1861; L.S.A. Lond. 1861
July 17	Laverick, J. V.	Poplar House, Hinderwell, Yorkshire	Lic. Fac. Phys. Surg. Glasgow, 1861; L.R.C.P.E. 1861
July 16	Lovegrove, J.	Sotwell Farm, near Wallingford, Berks	L.S.A. Lond. 1860; M.R.C.S.E. 1861
July 13	Macarthur, T. A. C.	Staff Assist.-Surgeon, Army	L.R.C.S.E. 1858
July 8	McShane, C.	Surgeon, Royal Navy	M.R.C.S.E. 1841
July 10	May, J. jun.	Stoke Damarel, Devon	L.S.A. Lond. 1859; M.R.C.S.E. 1861
July 25	Morgan, D. L.	Surgeon, Royal Navy	M.R.C.S.E. 1846
July 9	Mould, J. A.	Staff Surgeon, Royal Navy.	M.R.C.S.E. 1830
July 19	Nicholas, E.	43, Barbican, London, E.C.	L.S.A. Lond. 1860

Date of Registration.	Name.	Residence.	Qualification.
July 27	Nolloth, E.	Surgeon, Royal Navy	L.S.A. Lond. 1835; Extra Lic. R.C.P. Lond. 1845; F.R.C.S.E. 1857
July 8	O'Connor, D.	Surgeon, Royal Navy	M.R.C.S.E. 1856
July 11	Patterson, L. O.	Assistant-Surgeon, Royal Newfoundland Company	M.R.C.S.E. 1851
July 19	Pettifer, E. H.	9, Oakley-terrace, Southgate-road, Middlesex, N.	L.S.A. Lond. 1861
July 31	Roch, S.	Assist.-Surg. Army	M.R.C.S.E. 1854
July 8	Sanders, H. S.	Surgeon, 49th Regt.	M.R.C.S.E. 1846
July 2	Scott, R. C.	Surgeon, Royal Navy	M.R.C.S.E. 1847
July 23	Scott, W.	Fitzwilliam-street, Huddersfield	M.D. Univ. Edin. 1860; L.R.C.S.E. 1860
July 20	Seabrook, T. E. F.	3, Upper Wood-st. Brompton, Kent	M.R.C.S.E. 1860; M.D. Univ. St. And. 1861
July 10	Sheppee, W. H.	Bedford	M.R.C.S.E. 1861
July 8	Shore, O. B.	Friargate, Derby	M.D. Univ. Edin. 1860
July 12	Stabb, H. H.	St. John's, Newfoundland	M.D. Univ. Edin. 1837
July 22	Staples, F. P.	Fort Pitt, Chatham	M.R.C.S.E. 1860; Lic. K. Q. Coll. Phys. Irel. 1860
July 1	Strutt, G. H.	Tutbury, near Burton-on-Trent	L.S.A. Lond. 1860; M.R.C.S.E. 1861
July 23	Stuart, W. J.	Bury St. Edmunds, Suffolk	M.R.C.S.E. 1840; L.S.A. Lond. 1841
July 31	Sutton, F. J.	Martin, near Sleaford, Lincolnshire	L.S.A. Lond. 1860; M.R.C.S.E. 1861
July 29	Sydenham, A. C.	Peninsular and Oriental Company's Service	M.D. Univ. Edin. 1847; M.R.C.S.E. 1848
July 25	Wade, J.	Surgeon, Royal Navy	M.R.C.S.E. 1842; L.S.A. Lond. 1843
July 29	Waller, C. B.	9, Finsbury-square, London, E.C.	M.R.C.S.E. 1861; L.S.A. Lond. 1861
July 30	Webb, S. W.	Surgeon, Royal Navy	L.S.A. Lond. 1834; M.R.C.S.E. 1835
July 19	Wiles, J.	Assist.-Surg. Army	M.R.C.S.E. 1851; L.S.A. Lond. 1851
July 17	Willis, S. A.	Assistant-Surgeon, Royal Navy	Lic. Fac. Phys. Surg. Glasg. 1852; M.D. Univ. St. And. 1852; L.S.A. Lond. 1852
July 19	Wilson, E.	Assist.-Surgeon, 4th Light Dragoons	M.R.C.S.E. 1851.

UNIVERSITY OF ABERDEEN.—At the late Graduation Term the Very Rev. the Vice-Chancellor conferred Degrees on the following Candidates :—

The Degree of M.D. on—

John Gray, honourably distinguished

Adam, Harvey Hall
Meikle, Thomas Henry
Mortimer, William
Paterson, Alexander Ross
Thomson, Alexander.

The Degree of M.B. on—

Alexander Taylor, honourably distinguished.

The Degree of M.C. on—

Alexander Ross Paterson, honourably distinguished

Adam, Harvey Hall
Mortimer, William
Taylor, Alexander
Thomson, Alexander.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen, having passed the Examinations, were admitted Licentiates of the College during the recent sittings of the Examiners :—

Armstrong, W. C., Portsmouth
Hamilton, A., Edinburgh
Kydd, D., Forfarshire
Macaw, K., County Derry
McNabb, J., Ayr
M'Crea, J., County Down
M'Dougall, J. N., Ross-shire
Porter, J. D, Tyrone
Robson, W., Kirkcudbrightshire
Rowan, J., County Down
Ruggles, E. S., Connecticut
Skae, F., Ediuburgh.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, August 8, 1861 :—

Adams, Robert Seymour, Lymington, Hants
Ballard, Charles, Maidstone
Bennet, Hugh, Llanidloes, North Wales
Brook, Charles, Lincoln
Brown, Arthur Boyer, Connaught-terrace
Greaves, Charles Henry, Great Easton, Rockingham
Green, Edward, Brixham
Hawthorn, John, Newcastle
Lawton, Samuel, Sheffield
Martin, Henry Arthur, St. Austell, Cornwall
Popplewell, Thomas William, Gainsborough.

The following gentlemen also on the same day passed their First Examination :—

Adams, Webster, Ipswich
Anderson, John, Manchester
Dalgliesh, Jonathan, Newcastle-upon-Tyne
Proctor, Peter, Leeds.

APPOINTMENTS.

CALLENDER.—Mr. George Callender has been appointed Assistant-Surgeon to St. Bartholomew's Hospital.

CRITCHETT.—George Critchett, Fell. and Mem. R.C.S.E, Senior Assistant-Surgeon to the London Hospital, has been elected Surgeon, in the room of Mr. Luke, resigned.

GOATE.—Charles Edward Verling Goate, of Coventry, M.D. Univ. Edin., L.R.C.S. Edin., L.S.A. Lond., has been appointed Medical Officer for District No. 2 of the Coventry Union, vacant by the death of Frederick William Barton, M.R.C.S. Eng., L.S.A. Lond.

GREEN.—Mr. Thomas F. Green has been appointed Surgeon to the Rochdale General Dispensary, *vice* Mr. A. W. Franklin, resigned.

ISHERWOOD.—Felix William Isherwood, L.R.C.S.E., L.S.A. Lond., has been appointed Resident Surgeon and Apothecary to the Western General Dispensary, Marylebone-road, in the room of Mr. T. C. Kirby, resigned.

LYNES.—Edward Lynes, M.D. Univ. St. Andrew's, M.R.C.S. Eng. and L.M., L.S.A. Lond., has been appointed Surgeon to Bond's and Ford's Hospital, Coventry, in the room of Mr. F. W. Barton, deceased.

MCLEOD.—Dr. K. McLeod has been appointed Assistant-Surgeon to the Durham County Asylum, at Sedgefield, Ferry-hill, Durham, vice Dr. William Connor, deceased.

MOORE.—Dr. William Moore, M.R.I.A., has been elected Physician to Mercers' Hospital, Dublin.

MOORE.—Thomas Moore, M.R.C.S.E., L.S.A. Lond., has been appointed Medical Officer and Public Vaccinator for the Rowley Regis District, in the Dudley Union, Worcestershire, in the place of the late Mr. George Theophilus Kenwrick.

PETERSON.—Robert Haldane Peterson, L.R.C.S.E., L.M., L.S.A. Lond., has been appointed Medical Officer for the Broughton District, in the Glanford Brigg Union, Lincolnshire, in the room of Henry Marston, M.R.C.S.E., L.S.A. Lond., deceased.

DEATHS.

MARSHALL.—August 7, at Glasgow, Alexander Wilson Marshall, late of Birkenhead, Cheshire, M.D. Univ. St. Andrews, L.F.P.S. Glasg., L.S.A. Lond, aged 30.

MENZIES.—August 3, at Douglas, Isle of Man, Kenneth Menzies, L.R.C.S. Edin., aged 40.

MEREDITH.—August 9, at Shaftesbury-house, Bayswater, (the residence of Thomas Davidson, M.D. Oxon) Spencer Meredith, M.R.C.S. Eng., Assistant-Surgeon H.M.'s Madras Army, formerly of the Middlesex Hospital, aged 26.

NEWBOLD.—August 3, at Carnew, Co. Wicklow, Mr. Robert Newbold.

RUMNEY.—July 29, at Brough, Mr. John Rumney, aged 64.

SQUIRES.—August 8, suddenly, at No. 6, Blandford-streeet, Blandford-square, William Westbrook Squires, late of Liverpool, M.D., aged 65.

THOMAS.—August 11, at Swansea, John Thomas, of Peuyauoil, Llanegwad, Carmarthenshire, L.R.C.P. Edin., F.R.C.S. Eng. (Hon.), M.R.C.S., aged 41.

WARD.—May 5, at Fingal, Tasmania, Joseph Ward, M.D.

WHEELWRIGHT.—August 12, at No. 2, Campden-grove, Kensington, Thomas Wheelwright, M.R.C.S. Eng. (retired), aged 75.

WILLIAMS.—August 7, at Menai Bridge, Anglesey, Mr. William Williams.

LOUIS NAPOLEON AT VICHY.—The Emperor has presented Dr. Alquié, Consulting Physician, with a magnificent gold snuff-box, ornamented with diamonds, and containing an autograph letter of thanks. During the Emperor's stay at Vichy politics were neglected; there was not a shade of a Congress or a Conference, and his Majesty rigorously underwent the course of Medical treatment recommended to him. Some accounts say that the Emperor has diabetes; others, albuminuria.

ILLEGITIMACY IN SCOTLAND.—29,200 births were registered in Scotland during the second quarter of 1861. Of the 29,200 births, 26,700 were legitimate, and 2500 illegitimate, which gives the proportion of 8·56 per cent. of the births as illegitimate, or one illegitimate in every 11·6 births. A Table indicates the proportion of these illegitimate births in the several divisions and counties of Scotland, and shows a general accordance with the previous returns on the same subject. In the 126 town districts, the illegitimate births amounted to 8·37 per cent. of the total births; whereas in the 881 country districts they amounted to 8·81 per cent. of the births.

SYDENHAM'S HABITS.—From the following account, which Sydenham gives, about the year 1670, of his professional habits, it is evident that he was much given to riding in his carriage, using it twice a-day :—"In the morning when I

rise I drink a dish or two of tea, and then ride in my coach till noon. When I return I refresh myself with any sort of meat of easy digestion that I like; I drink somewhat more than a pint of Canary wine immediately after dinner every day to promote the digestion of food in my stomach, and drive the gout from my bowels. When I have dined I betake myself to my coach again, and, when my business will permit, I ride into the country two or three miles for good air. A draught of small beer is to me instead of a supper, and I take another draught when I am in bed and about to compose myself to sleep."

A New Anæsthetic.—A new anæsthetic has been brought to the notice of the Profession at Boston. For the present, it is called kerosolene, and it is found in the distillation of the kerosine oil, from the Albert coal. It comes among the first products of the distillation, and in large quantities. Professor H. J. Bigelow, who has been testing its value for anæsthetic purposes, gives the following account of it:—"This fluid presents remarkable properties. It is tasteless as water, volatile and inflammable as ether, though burning with a dense white light; of a faint chloroform odour, which, as it evaporates, changes to that of coal tar, and then disappears absolutely and altogether; so that a handkerchief saturated with the fluid has, at the end of a few minutes, when dry, no odour at all, nor has the room or atmosphere where it has been used, any trace of its presence. Both ether and chloroform leave, in different degrees, a persistent, *fade*, and stale aroma after evaporation, as is well known. They are also far less agreeable to inhale than this new agent, which has thus an obvious advantage over either of them. A few whiffs were sufficient assurance of its efficacy as an anæsthetic, which, with its other qualities, as I ventured to remark, would place the kerosolene beyond any known anæsthetic, provided its use was not followed by headache, vertigo, or other unpleasant symptoms, and provided it should prove as free from danger as ether. Subsequently, I inhaled the new vapour, which Dr. Hodges at my request administered. Complete insensibility supervened, lasting several minutes, with some diminution of the volume of the pulse. Its effect was wholly agreeable, leaving neither headache nor nausea, nor bad taste." After describing three cases in which he had used it, intermitting pulse and partial asphyxia having been produced, he says:—"In conclusion, it may be remarked of these three cases, that they are insufficient for satisfactory demonstration, and that their common and unfavourable symptoms may well have been but a coincidence; yet they suggest some caution in the use of the kerosolene vapour. It is probably more potent than that of ether, requires a free admixture of air, and may produce upon the system some impression or influence other than that of the mere intoxication attendant upon the use of ether. In awaiting further evidence, it may be considered established that kerosolene is an anæsthetic of undoubted efficacy, and that it possesses certain remarkable and attractive properties peculiar to itself."

Causes of Death in England.—To the Registrar-General's Report is appended, as usual, an instructive paper by Dr. W. Farr on the causes of death in England. The year 1859 is the first in which diphtheria has obtained a distinct line in the tables; it had previously been confounded with cynanche, and when the two are put together the rapid progress of this great epidemic becomes evident; the deaths in 1855 were 385; in 1856, 603; in 1857, 1583; in 1858, 6606; in 1859, 10,184. Epidemics of diphtheria are clearly described in the 17th century by Italian and Spanish writers, and its frequent association with scarlatina justifies the inference that the diphtherine, its *materies morbi*, is some modification of scarlatinine. Of the whole deaths of the year one-fourth were referred to zymotic diseases. Small-pox destroyed 3848 persons, chiefly children who had not been vaccinated, an instance, as Dr. Farr remarks, of the rigour with which the infringement of sanitary laws is visited, for the children perish and the parents lose their offspring by the neglect of a precaution of the simplest kind. A fatal outbreak of erysipelas at the Winchester Infirmary was traced to a cesspool. Of the parasitic diseases it is remarked that the ova of worms must be derived generally from impure river waters, into which the refuse of towns is poured. We have but an imperfect conception of the number of deaths from excessive drinking; but 345 were directly ascribed to intemperance and 545 to delirium tremens, 890 in all from the two forms of alcoholism. The deaths from tuberculous disease have decreased since 1853; those from bronchitis have increased very greatly of late years. Annually 75 persons in 100,000 die a violent death. 13,056 of these deaths in 1859 are ascribed to accident or negligence; among them were 279 by poison. 1248 deaths were declared by coroner's juries to be suicides; 338 murder or manslaughter, 18 persons were killed by lightning, nearly all persons of out-door occupations.

Arsenic.—A "Father" writing to the *Times* says:—"Yesterday a child of mine purchased at a respectable toy-shop a toy, which I believe is called 'Flying Butterflies.' The wooden part is of a bright green colour, which caused me to suspect that it was most likely 'emerald green.' Upon examination I found it to be so—*i. e.*, a compound of arsenic and copper, or arsenite of copper, one of the most powerful of all the mineral poisons. The colour is not painted on with oil, but smeared on with water, and so it is easily removed by sucking, or by being placed in a glass of water. I may, with your permission, also state that I have examined several hanging-papers of various shades of green, in all of which I have detected an amount of this arsenite of copper which is really astounding, and the use of which must be, to say the least, dangerous. Surely some Officer of Health should look after this wholesale and retail sale of poison."—A "Smoker" says:—"A few days ago I bought of a chemist what is called a mersehaum-coloured pipe—a pipe made of common clay, and treated with arsenic to improve its appearance. The chemist was careful to inform me that the lips were not to be allowed to touch the pipe, but that it was to be used with an India-rubber mouthpiece. The reason he did not state. A nephew of mine, a Medical Student, who happened to be visiting me, when he saw me with it at home, suggested that I should not use it, for, he said, 'All our fellows have suffered from them.' His 'fellows' are the Students at the Medical School of which he is a member, and after using these pipes they have been attacked with sore throats and the other symptoms of arsenic taken into the system."

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 10, 1861.

BIRTHS.

Births of Boys, 881; Girls, 878; Total, 1759.
Average of 10 corresponding weeks, 1851–60, 1576·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	601	571	1172
Average of the ten years 1851-60	597·1	582·8	1179·9
Average corrected to increased population..	..	..	1251
Deaths of people above 90	1	2	3
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus	Diarrhœa.
West	463,373	..	5	1	1	6	4	24
North ..	618,201	..	3	4	4	9	7	38
Central ..	378,058	..	1	1	..	10	7	26
East	571,129	1	2	5	..	10	11	41
South ..	773,160	3	7	11	6	8	14	48
Total.. ..	2,803,921	4	18	22	11	43	43	177

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·809 in.
Mean temperature	64·4
Highest point of thermometer	81·3
Lowest point of thermometer	50·7
Mean dew-point temperature	57·3
General direction of wind	S.W.
Whole amount of rain in the week	0·32 in.

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Sir Henry Cooper's paper on Norwegian Scabies shall appear next week.

Mr. Weston should write to the Secretary of the College or University at which he wishes to enter, and make the inquiry.

Leech.—The pay of Medical Officers in the Peninsular and Oriental Company varies with the length of service. The full particulars may be obtained by writing to the Secretary of the Company.

A Glasgow Student.—Mr. Macaulay evidently confounded the "University of Glasgow" with the "Faculty of Physicians and Surgeons of Glasgow."

The Letter of our Liverpool Correspondent is unavoidably delayed until next week.

K. H.—Lord Herbert died of granular degeneration of the kidneys. He had had albuminuria for several months, and latterly there was failure of eye-sight and the other ordinary cerebral symptoms attending uræmia.

If *Libertas* will state precisely what he wants to know, we we will do our best to answer his questions; bnt we cannot frame a code of laws for the guidance of Governors of Dispensaries.

Dr. Wilson's case will appear next week.

Mr. Mitchell.—We hardly think the photographic proof of identity likely to be seriously entertained by the Colleges.

Mr. Hulke's paper on Closure of Clefts in the Hard Palate shall appear as soon as possible.

C. K.—Our correspondent in describing the accident on Mont Blaue, stated that the gentleman's trowsers were down. It surely was nnnecessary to explain to readers of ordinary intelligeuce *why* any one on a hill-side draws his trowsers dowu.

MEDICAL HIGHWAYMEN.

Some late advertisers of patented pills,
By way of persuading the public to try,
Bid all who are cursed with corporeal ills
To "take them and *live*, or refuse them and *die!*"

God help us!—says Timon—and must we defend
Our persons and pockets with pistol or knife?
One can easily see what the rascals intend—
'Tis the highwayman's cry, "Your purse or your life!"

SCENES FROM THE LIFE OF A HOMŒOPATH.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your last number, and in an article headed "Scenes from the Life of a Homœopath," it is said that one of these light-fingered gentry did recently obtain from the University of Glasgow the Diploma of Licentiate in Medicine and Surgery, purporting at the time to have studied the Profession at the Andersonian and elsewhere.

You are doing public service in exposing imposture of any sort, but I have reason to think that your contributor has made some unconscious misstatements.

As a Graduate in Arts and in Medicine of Glasgow University, I know the following propositions to be correct:—

1. The University of Glasgow gives no such degree as "Licentiate in Medicine and Surgery."

2. It does not receive the Certificates of the Andersonian Lecturers, although they are for the most part men of first class ability.

3. No one is admitted to Examination for either a Medical or a Surgical Degree in the University of Glasgow, unless he has spent there at least one of the assigned years of study.

There must, therefore, be some mistake about our globulistic *homme d'industrie* having obtained a Degree of "Licentiate in Medicine and Surgery from the University of Glasgow."

Allow me also, in common with the rest of my Professional brethren, to thank you for your recent strictures on questions of etiquette about Homœopaths and their impostnre. I am, &c.

St. Ives, Hunts, August 12. M.R.C.S. and L.A.C.

THE SIZE OF SCOTTISH BRAINS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—One of your contribntors, in delivering a funeral oration over Lord Campbell's brain, asserts that brains are larger in Scotland than in any other part of the world, and in the eastern counties of Scotland much larger than in any other part of it, north, south, or west. Now, North Britain does not average more than forty-five miles from east to west. What element, geographical, ethnological, meteorological, or logical of any sort, can so localise the development of large brains, must be a puzzle to you and to all the *literati* of the age. John Burns, Laurie, Watt, Ure, MacKenzie, Andrew Buchanan, to say nothing of Reed and Adam Smith, could not have had large brains, because they were not born in the East of Scotland; and Sir J. Newton, Locke, Bacon, Leibnitz, Kant, Shakespeare, Montesquieu, Pitt, Fox, Napoleon, and Guizot, could not have had large brains, because they were born south of the Tweed!

Genius is limited to no latitude, but we are all very apt to be narrow-minded, however "large-brained," if we belong to a very small section of humanity that has really distinguished itself.

If ever the human brain shonld be proved to be larger in the eastern than in the western part of Scotland, the best reasonings would assert the difference to be modern and acquired, and (except in the case of such men of high and noble intellectualism as Lord Campbell) the result of the throbbing of envy, the brain expanding, skull thickening action on the external material of the vexed spirit within, which all who know anything of the eastern population of Scotland know to be the instantaneous result of the slightest respectful allusion to Glasgow, whose growth during the last fifty years in every creditable element of human history has made the West of Scotland in every sense equal, and in many respects snperior, to the East. Within a radius of twenty miles from Glasgow you have certainly one-third of the Scottish population, and probably one-half of its personal property. It is certainly very droll if the brains of its people are not equal to the brains about twenty miles to the east.

I am, &c.

August 12. L. C.

COMMUNICATIONS have been received from:—

Sir HENRY COOPER, Hull; Mr. BULLEY, Reading; Dr. HAINES, Bombay; Dr. THOROWGOOD; Mr. HULKE; Dr. SOELBERG WELLS; Dr. ANDERSON; Dr. R. D. THOMSON; REGISTRAR-GENERAL; FABIUS MAXIMUS; REGISTRAR-GENERAL, Scotland; Mr. MITCHELL; Mr. DAY; Dr. ROBERTSON; Dr. WILSON, Glasgow; Dr. GLOVER; and Mr. HARRISON.

APPOINTMENTS FOR THE WEEK.

August 17. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

19. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

20. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

21. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædie Hospital, 2 p.m.; Middlesex, 1 p.m.

22. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

23. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday next:—

By Mr. Fergusson — Congenital Phymosis; Removal of Large Malignant Tumour from Breast.

By Mr. Wood—For Radical Cure of Hernia.

New Remedies and Auxiliaries in

MEDICINE and SURGERY, by SAVORY and MOORE.

PLASMATA, or GRAEFE'S GLYCERINE OINTMENTS, for Eye Diseases.

CONCENTRATED ESSENCE of SUMBUL, for Nervous Disorders, Epilepsy, Spasms, Cramp, &c. &c.

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"They are most useful instruments."—Medical Times and Gazette, May 4, 1861.

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ORIGINAL LECTURES.

LECTURES ON THE SPINAL CORD,

DELIVERED AT

The College of France,

DURING THE SUMMER SESSION 1860,

By M. CLAUDE BERNARD,

Member of the French Institute; Professor of General Physiology at the Faculty of Sciences, &c.

Lecture XXI.

GENERAL RECAPITULATION OF THE VIEWS EXPRESSED IN THIS COURSE.

Summary: The Nervous System is destined to create a perfect Harmony between the Different Parts of the Body—There exist only two Orders of Nerves: Sensitive and Motor—The only real Difference between these two Classes of Fibres is the Opposite Direction which the Nervous Fluid follows in Travelling through them—Impossibility of conceiving one Set of Nerves as Existing Independently of the Other—Importance of the Action exerted by Nerves upon Vessels—The History of Local Circulations entirely rests upon the Discovery of Vasomotor Nerves—The Nerves exert their Power upon the Vessels through Muscular Agency, as usual—Action of the Nervous System upon itself—Application of these Views to Pathology.

Gentlemen,—The nervous system, as Blainville philosophically observed, creates a secret harmony between the different parts of the living frame, establishes a permanent connexion between them, and renders them mutually dependent upon each other. The principal object of the preceding Lectures has been to show that Nature employs two great classes of nerves for the accomplishment of this purpose; there only exist two kinds of nervous fibres in the economy which are, so to speak, derived from each other, and unite in the central parts of the system to form one great apparatus, the only real difference between sensitive and motor nerves being the direction of the nervous currents which travel along this fibre; it would, in fact, be altogether impossible to conceive in any given animal one set of nerves as existing independently of the other; and the chemical phenomena which take place within the living body being, as we have shown, the result of the action exerted by a particular class of motor nerves upon the vessels, are inseparably connected with the other manifestations of nervous activity.

The importance of the connexion which exists between nerves and vessels has, we trust, been strongly impressed upon your minds; it is the key to all the local modifications which arise upon certain given points of the economy, the general circulation being left undisturbed, and the heart's action remaining the same as before. In short, the discovery of the vasomotor nerves is pregnant with deeply-interesting results, both in Physiology and Medicine; it explains the singular phenomena of local circulation, from which the great majority of morbid symptoms are derived. No disease ever fixes upon all the organs at once; but local effects give rise to general affections, and these in their turn create local disorders; but the knowledge of the general laws of circulation cannot evidently enable the physiologist to explain the congestive phenomena which almost invariably result from the action of morbid causes. As long as we content ourselves with taking into consideration the impulse given to the blood in the heart, and the resistance which the tissues oppose to its progress, we shall only be able to account for general results, which extend to the whole economy. There exist, therefore, in the eyes of the physiologist and Medical philosopher, two circulations entirely distinct in their nature, and in the effects which arise from their changes; the first is the general circulation, which Harvey's immortal labours have brought to our knowledge; the second is the capillary circulation, which lies under the direct control of the nervous system, and acts separately upon each individual spot of the body. To this part of the vascular apparatus are the majority of the morbid symptoms, or physiological phenomena, to be referred when a single point is affected, the other parts of the economy remaining in their usual state. There exist, in fact, two kinds of capillary vessels; the first establish a direct communication between arteries and veins, and secure a passage for the blood which flows from one system into the other; the second being of smaller dimensions, lie in contact with the histological elements of the tissues, and enjoy a considerable influence upon them. On this portion of the vascular system is nervous power chiefly exerted.

Another point to which your attention has been drawn is the mode of action through which these results are obtained; contractile elements are as usual placed at the disposal of the nervous system; it cannot, in fact, be rationally asserted that the nerves act directly upon the blood, and modify its chemical composition, or change the direction in which it flows. In the vessels, as in all other parts of the body, the action of nerves is connected with the muscular element; and microscopical anatomy confirms the data of physiology by showing muscular fibres to exist in the vessels.

We are thus enabled, through the action of the sympathetic nerve, to modify at our pleasure the nutritious and vital activity of all tissues in living animals; bones, muscles, glands, and other organs, obey the power of the nervous system. There exists one tissue, however, in which this process appears still more extraordinary; we allude to the action of the nervous element upon itself. So complicated, in fact, is the disposition of the living process, such is the intricacy of vital phenomena, that homologous tissues sometimes modify each other. This reciprocal influence, in the present case, is easily explained; the numerous vessels which ramify in the brain and spinal cord being, as in other regions, placed under the control of the ganglionic system, the influence of the sympathetic nerve extends to the very centre of the nervous system.

The experiments of Donders, which we alluded to on a previous occasion, have fully justified the opinions here expressed; the introduction of a thermometer into the skull proves that after the division of all the branches of the upper cervical ganglion, the cerebral substance itself participates in the effects of this operation; its temperature rises, its vascularity increases, and, as a consequence, the general sensibility of all the cerebro-spinal nerves is considerably increased. An operation performed on a single point of the nervous system gives rise, therefore, to a general hyperæsthesia of the whole apparatus. Might not these observations lead to a more accurate knowledge of the cerebral functions, hitherto involved in such deep obscurity?

The application of these views to pathology has been partly attempted in the preceding Lectures; and we have endeavoured to show you the intimate connexion which unites the nutritive process to the leading features of inflammation. Without attempting to give a definitive explanation of these facts, we feel justified in stating that the influence of the vasomotor nerves upon the phenomena of nutrition is proved beyond the possibility of a doubt: we have shown you that the division of the principal branches of this nerve gives rise to inflammatory symptoms in the corresponding organs, when the animal is deprived of food. The intimate nature of these properties of the nervous system cannot, of course, be satisfactorily explained; but you are fully aware that the primitive causes of all natural phenomena lie beyond the reach of human knowledge; and the obscurity in which this part of the subject is involved, is not the exclusive privilege of nervous action: an impenetrable mystery hangs over the origin of all the powers which maintain life.

In concluding this Course, it remains for us to show the relations in which our principles stand to the doctrines which actually prevail in the Medical Sciences. The history of Medicine embraces two distinct periods—that of empiricism, and that of scientific observation. Such is the case with all branches of human knowledge: we start from direct observation at first, and gradually rise to the conception of a regular system of definite laws, embracing all the relations of cause and effect. The progress of Physiology and Medicine has been slower than that of other sciences; but they rapidly tend to acknowledge settled rules and general laws; and the experimental method alone is capable of leading us to the long-wished-for result. We do not pretend, therefore, to exhibit the science of disease in its definitive and perfect form; but we have endeavoured to impress upon your mind the fundamental principles which must in future guide the labours of all scientific observers. The only solid foundation

on which the edifice of Nosology can be raised is Physiology; and in spite of the cavils of those who, after devoting the greater part of their lives to clinical observation, have been led to despise all other methods of acquiring knowledge, the artificial barriers which prejudice had raised between the two sister sciences are crumbling into dust. We shall therefore pursue the course of our experimental labours; and in the course of the next Session we shall endeavour to elucidate, by physiological operations, the history of one of the great morbid series with which clinical observation has made us acquainted.

ORIGINAL COMMUNICATIONS.

SUPPOSED CASE OF NORWEGIAN SCABIES (S. CRUSTOSA).

By Sir HENRY COOPER, M.D. Lond., F.R.C.P.
Physician to the Hull General Infirmary.

Scabies has been unusually prevalent in this town and neighbourhood for several months. The attending eruptions have been of very variable character, and have led, in the early stages, to some difficulty and error of diagnosis. The prevailing form, so far as my experience goes, has been the papular, though the ecthymatous has been exceedingly common. Two or three cases apparently of simple ecthyma, with more or less derangement of the general health, were admitted by me into the Hospital without any suspicion in the first instance of their true character. One of them shortly after admission exhibited a crop of pustules like spurious variola or swine pock, unattended at first by any special symptom; but night itching and abrasions soon showed this to be a case of S. purulenta, which was very virulent and intractable. Other cases of ordinary scabies afterwards appeared in the same ward.

While the ward was in this state, a little girl, aged 6, was sent in from the country, one of a destitute family, living in a healthy situation on the Wolds of Lincolnshire; a feeble, ill-nourished child, who was described to have suffered from skin disease for many months. A more pitiable object can scarcely be conceived than this child presented on her admission. The whole surface was entirely covered with a dry, thick, light-brown crust, fissured in the direction of the flexures of the body, and emitting a faint, sickly odour. She rolled herself up into a ball, resting upon her forehead and knees in bed, so as to avoid stretching the skin on the inner and more sensitive surfaces. She was excessively attenuated, though she ate at times heartily, and her functions were performed naturally. She never complained of the slightest itching, and the only complaint which could be drawn from her was, of a burning or smarting sensation. When the crust separated in large flakes from the skin, as it did spontaneously, but particularly in the warm bath, it left the surface below of a uniform red colour, without any appearance of specific primary eruption. Examined under the microscope, these portions of crust were found to be composed of acari living and dead, of both sexes, and in every stage of their development. Softened by diluted liq. potassæ, and rendered clear by glycerine, they exhibited beautiful clean specimens of male and female acarus scabiei, ova empty or containing the young acarus, and masses supposed to be the excreta. The illustration to Dr. McCall Anderson's tenth paper on "Parasitic Affections of the Skin," contained in the *Medical Times and Gazette* of July 27, gives a most accurate representation of this extraordinary appearance, and it was this communication which first convinced me of the true nature of the case. Before I saw Dr. Anderson's paper, I had supposed that the presence of the acari might be accidental, that they had been derived from the other cases in the ward, and had attained their extraordinary development from meeting with a favourable medium in the eczematous crust. I had, in fact, looked on the case as one of severe and general eczema, and treated it accordingly. Considering, however, the universal presence of the acarus over the whole skin, forming an essential part of the crust; and comparing the case with Dr. Anderson's description, I have little doubt that this is an instance of the very rare disease he describes, an instance of which has not been recorded before, I believe, as occurring in this country, and of which there are only few notices on the Continent of Europe.

The case improved very much under good diet, arsenic, and baths of sulphuret of lime; but eventually the powers of life flagged, aphthæ appeared in the mouth, the child was no longer able to take food, and being removed home, rapidly sank. There were cases of simple scabies in the house from which the child was brought; but from the habits of the inmates this might, under any circumstances, have been anticipated. The nurse who bathed the child had a severe attack of scabies in the ordinary papular form, which yielded readily to a solution of sulphuret of lime.

I would remark, in conclusion, that there appears to be no one specific eruption which indicates the presence of the acarus scabiei. The nature of this is determined by the temperament or predisposition of the patient. An irritation is produced, and the skin is subjected to constant mechanical attrition to remove it. In one case, vesicles,—in another, papulæ,—in a third, pustules, are the result (and why not squamæ?); depending on the action, not of the acarus, still less on the nails of the scratcher, but on the susceptibility of the various tissues in which these eruptions respectively have their seat.

Hull.

SURGICAL REPORTS AND OBSERVATIONS.

By F. A. BULLEY, F.R.C.S.
Senior Surgeon to the Royal Berkshire Hospital.

ABSCESSES OF THE KIDNEY—SCIRRHUS OF THE PROSTATE GLAND—CONSTRICTION OF THE COLON—DEATH—POST-MORTEM EXAMINATION.

James R., aged 23, an agricultural labourer, was admitted into the Hospital February 5, 1861, suffering apparently from symptoms of disease of the bladder. He is an unhealthy-looking young man, and is much emaciated through the long continuance of his disease.

The present history of his complaint is, that he passes large quantities of pus mixed with his urine, that it gives him extreme pain in passing along the urethra, that he cannot void it at all unless in a sitting posture, and that he constantly suffers from pain in the bladder, which is occasionally so excruciating as to be almost insupportable, and also in the situation of the kidneys, where it is sometimes very severe. His bowels have lately been habitually constipated. His tongue is red, he is thirsty and feverish, his pulse feeble and quick.

Towards the evening of his admission he was seized with complete retention of urine, to relieve which the House-Surgeon passed a catheter without much difficulty into the bladder, and drew off a considerable quantity of a fetid fluid, composed almost entirely of pus, which relieved the general uneasiness a little, but not much. After this I ordered the lower part of his body to be enveloped in thick flannels soaked in hot water, for the purpose of producing local diaphoresis, and to take the following powder:—℞ Pulv. nitri gr. xv.; pulv. ipecac. comp. gr. x. bis in die.

February 6.—The local application of the hot water produced a copious perspiration over the lower part of the body, which continued the greater part of the night, by which the pains have been greatly relieved, and he is now able to pass the same kind of purulent fluid, in which, however, there appears to be very little normal urine, by his own efforts. His feverish symptoms are also relieved.

February 7.—He complains of a feeling of fulness or oppression about the pit of the stomach. This afternoon, after taking a dose of castor-oil, he was seized with most distressing nausea and vomiting, which continued unabated by medical means until he died, on February 9—five days from the date of his admission, being quite sensible to the last. The matter which he brought up just before his death had been dark-coloured and offensive, and almost fæcal in its character. His bowels had continued obstinately constipated throughout.

The following additional particulars of the case will partly account for the appearances which presented themselves on the post-mortem examination:—

Five years ago, being at the time in perfect health, and never previously having displayed any morbid tendency of any kind, he received what he thought to be a strain in the left groin, through struggling with a restive horse. A painful inflammatory swelling immediately presented itself at the part, which, continuing to resist all means used to reduce it, and as his general health was apparently giving way, he was admitted into the Bath Hospital, where the tumour suppurated, and was subsequently opened, and sloughed. Here he remained sixteen weeks, the discharge continuing, and his health progressively declining; the ulceration, however, eventually healed. Since this period he had been quite unfit for his work, appearing never to have regained the least strength, and was even incapable of getting about without the assistance of a stick.

The first decided symptoms of organic urinary disease began to show themselves about Midsummer last, when he found his water becoming turbid and mixed with blood, with a pressing desire to pass it every five or ten minutes, soon after which it manifestly became diminished in quantity and loaded with yellow purulent matter. It now began to pass with difficulty, and he became affected with the most excruciating pains in the loins, occurring in paroxysms, which lasted for a time, and then went off. On one or two occasions he had had active hæmorrhage from the bladder, for which he was advised to take the oil of turpentine, but as it had no effect in checking it, but rather seemed to increase the pain in the kidneys, it was discontinued.

He had had one or two attacks of retention relieved by the catheter, by drawing off each time a quantity of fetid purulent urine. Within the last three weeks preceding his admission the pains in his loins had lost their paroxysmal character, becoming constant, and at times so severe, as to be scarcely endurable.

Post-mortem Inspection, Thirty-six Hours after Death.—The body was emaciated. There is the mark of a somewhat irregular cicatrix in the left groin, such as would be produced by a tedious ulceration of the part. The lungs and heart were apparently quite healthy, the latter of an average size, with some yellowish transparent fibrine in its cavities.

On opening the abdomen, the transverse and descending portions of the colon were found to be filled, and, indeed, completely distended by a mass of impacted, hardened fæces, the impaction extending as far as its sigmoid flexure, at which part the intestine was bound to the abdominal parietes near the internal abdominal ring, by slight bands of lymph, one of which of about the size of a piece of small whipcord, seemed to pass completely round the intestine, deeply indenting it, so as to form a considerable constriction of the gut, and thus prevent, in a great measure, the passage of the fæces through the contracted part. The small intestines generally were inflated with air, but there were no marks of inflammation in any part of them. On opening the urinary bladder, a considerable quantity of fetid pus, mixed with urine escaped through the incision. On examination, its coats were found to be thickened and contracted, especially at the back part, where there were apparent two or three flat, strong fasciculi of muscular structure, spread out like a fan upon this part of the surface; these bands had acquired great hardness, as if they had been constantly lately under the influence of tonic spasm, and had communicated a feeling like a foreign body being in the bladder when the catheter used for the retention was rotated in the organ, the mucous membrane was tolerably free from disease.

On cutting through the lateral lobes of the prostate gland, which were each enlarged to about the size of a small walnut, they were found to have completely lost their natural structure and appearance, and presented all the well-marked characters of true scirrhus, being of almost cartilaginous hardness, perfectly homogeneous in texture throughout, the sections exhibiting the usual glistening fibrous surface of such structures, and exuding on pressure, a whitish semitransparent fluid like thin water arrowroot. The tumour of the right lobe extended laterally like a flattened band into the cellular tissue connecting the mucous and muscular coats of the organ, with which it appeared to be intimately blended. The middle lobe was not enlarged but rather atrophied than otherwise. The ureter on the left side was much more capacious than natural, and a considerable quantity of fetid pus passed into the bladder on pressure being made along its course.

The pelvis of the left kidney contained a large quantity of fetid pus mixed with urine. The surface of this kidney was irregular and nodulated; on cutting into it, it was found to be occupied in almost all the extent of its tubular secretory structure, by a number of cavities of abscesses, varying in size from that of a hazle nut to a full sized nutmeg, lined with semiconcrete pus, and partially filled with fetid purulent matter, as well as the calyces and pelvis of the organ. A great portion of the cortical structure still retained its natural appearance.

The right kidney was hypertrophied to more than twice the natural size, but its textures were healthy. The pelvis greatly distended, when opened contained nearly half-a-pint of normal urine; it had formed near the origin of the ureter, a kind of pouch or bladder-like appendix, which had pressed in some way upon the commencement of the tube of the ureter, and had so prevented the urine passing out of the pelvis, causing in this way a complete retention of urine in its cavity, which was probably the immediate cause of death.

Remarks.—The foregoing case may be considered interesting in one or two particulars. It should be borne in mind that, prior to the receipt of the injury, which at first seemed to be only a simple sprain in the groin, the patient had always enjoyed the most perfect health, and that immediately afterwards he began to languish, and continued declining until his death. I cannot account for the fatal effects of such an apparently trivial injury otherwise than by supposing that at the time of the accident there occurred a hernial protrusion of the sigmoid flexure of the colon, which had become naturally reduced, but was followed by such an amount of inflammation, both of the intestine and the parts through which it had been protruded, as caused an effusion of lymph, and the consequent agglutination of the gut to the parietes near the ring; that this obstruction thus occasioned, increased by the cord-like girdle which encircled the gut, produced the impaction of feces in the descending colon, which by its contiguity to the kidney of that side, as well, probably, as by its pressure on the spermatic veins, had caused congestion and gradual inflammation of the organ, and thus formed the basis of the disorganisation which ultimately destroyed the patient. The scirrhous condition of the prostate, as observed in this case, is a somewhat rare affection of the part. Mr. Coulson (a), an eminent authority in diseases of the bladder, states that he had never met with a case of scirrhus of the prostate in his own practice, attributing the hardness which he had sometimes observed in the gland to the deposit of some material sufficient to distend but not to weaken the fibrous capsule around it. He mentions, however, that Mr. John Adams, of the London Hospital, the late Mr. Howship, and a few other Surgeons, have recorded some well-marked instances of this disease, and gives a case at large, by Mr. Haynes Walton, in which the existence of this form of cancerous deposit in the prostate is satisfactorily established.

CASE OF POISONING IN INDIA.

By ROBERT HAINES, M.B.,
Professor of Materia Medica, Grant College, Bombay.

In the Sessions of the Supreme Court of Bombay, held in March, 1861, three men, Cassim Amboo, Cander Mokideen, Mussulmans, and Cowasjee Palloujee, Parsee, were indicted for the murder of a Hindoo woman, named Shivee. It appeared from the evidence for the prosecution that the two first prisoners had come in a hack buggy or gig, driven by the Parsee, to the house in which the deceased Shivee, a courtesan, lived with another woman of the same profession, named Gunga, and persuaded the women to accompany them to a fair in the neighbourhood. On the way the party stopped at a liquor shop, and the prisoners treated the women to some spirituous liquors, with which there was little doubt that they had mixed some liquid taken from a bottle which they had brought with them. In a short time after proceeding on their way, probably in about a quarter of an hour, both women became insensible, and were then taken out of the buggy and deposited by the side of the road. They were found there some five hours afterwards, still insensible,

(a) "Coulson on Diseases of the Bladder and Prostate Gland." Fifth Edition. Page 606.

the deceased Shivee wholly, and the woman Gunga partly, despoiled of her gold and silver ornaments. They were taken at once to the Jamsetjee Hospital, where, after vomiting freely, Shivee almost immediately expired. The pupils were strongly dilated. Gunga gradually regained her consciousness, but vision was more or less disturbed, and the intellect impaired for forty-eight hours. The chief complaint was of burning pain in the throat. Both women vomited several times.

It was proved that on the morning of the occurrence one of the prisoners, Cander, had purchased a small quantity, about a drachm and a half, of datura seeds, and a small piece of aconite root; and a woman with whom he resided deposed to having seen him on the afternoon in question, grind up on a stone some small seeds resembling "ajwan," with other ingredients undescribed, boil them for a quarter of an hour with water, filter the liquor through a piece of cloth, and pour it into a wine bottle. This bottle he and Cassim took away with them in the buggy of the Parsee prisoner. In the house in which this transaction is said to have occurred were found the rag which the woman swore had been used as a strainer on the occasion, with a quantity of vegetable matter still adhering to it; also a lump of arsenic, a piece of aconite root, about a drachm of datura seeds, and a small quantity of hyoscyamus seeds. The procuring of these latter seeds was not traced to the prisoner: they are, however, sold in some abundance in the bazaars, being regularly imported from the Persian Gulf, and in consequence of a distant resemblance that they bear to the more familiar ajwan seeds, they are known as "Khorásanee Ajwan," from their place of growth, Khorasan.

On the post mortem examination of the deceased, Shivee, the lungs were found somewhat congested, and the stomach contained about six ounces of a thick palish fluid, smelling somewhat of spirits. The mucous membrane showed patches of inflammation, but not of a severe character. The state of the other organs did not call for remark.

The stomach with its contents and the matters found in the house of the prisoner were put into my hands for analysis. The stomach with its contents and the piece of rag were separately treated by Stas' process. The etherial residue from the stomach, about two drops in all, gave no sign of crystallization; it turned reddened litmus paper rather slowly but distinctly blue; it gave with chloride of gold a pale yellow, and with solution of iodine a reddish brown precipitate, but none with chloride of platinum or tincture of galls. About half a drop placed in the eye of a young man produced no irritation, but after an hour and a-half marked dilatation of the pupil, which lasted several hours. The piece of rag was then examined. Under the microscope the matter adhering to it, which weighed somewhat less than ten grains, was found to consist chiefly of resiniferous cellular tissue, but neither woody nor vascular tissue nor cuticle could be distinguished. Submitted to Stas' process, it yielded a milky residue, which could not be made to crystallize; it had a somewhat bitter taste, and gave immediate and copious precipitates with chloride of platinum, chloride of gold, solution of iodine, and tincture of galls. Its alkaline reaction was most decided. A very minute quantity put into my own eye caused no smarting, but an immediate feeling of distention in the caruncula, followed by a similar feeling in the globe of the eye. In half-an-hour the pupil became excessively dilated, and the dilatation and impairment of vision did not subside for nearly twenty-four hours. In an hour dryness in the nose on the same side was felt, followed by a still more disagreeable dryness of the throat.

There could be no doubt then that both in the stomach of the deceased and upon the rag a poison of the datura class was present. The smallness of the quantity found in the stomach is to be explained partly by the vomiting, and partly by the absorption which must have taken place during the long interval which elapsed before death. The case was complicated by the probability that both hyoscyamus and datura had been used, and by there being at first a presumption that aconite also had been added. The matter on the piece of rag, too, had a strong disagreeable smell, not very dissimilar to that of the piece of aconite root which was brought to me(a). This root was, however, entire, or at least as much so as the roots of the shops usually are, so that the aconite, if used at all, must have been taken from another source. The trace of alkaloid obtained gave no indications of aconitina to the tongue, and in the presence of daturia or hyoscyamia it was obviously next to impossible to determine the point by chemical evidence. The object of the prisoners appeared to have been only to produce insensibility, with the view of effecting the robbery of the ornaments. In their houses were discovered numbers of ornaments, in all probability obtained by similar means. The metallic poisons, and especially arsenic, were sought for in the stomach and rag, but no trace of any could be found.

The buggy driver was acquitted, but the two other prisoners were found guilty, and sentence of death was recorded against them, commuted afterwards to transportation for life and for fifteen years respectively.

Bombay.

(a) The root of the Aconitum Ferox, a native of Cashmere and of the Himalayan slopes, which yields the common "Buchnag" of the Indian bazaars, is said to be (like the European root) naturally odourless, and of a light colour. The root of the drops is internally of a dark brown, nearly black colour, and has a strong odour, somewhat like that of cured fish. It would appear to have acquired this by some subsequent treatment. Dr. Honigberger states that it is customary to steep it in cow's urine for some time before bringing it to market.

CASE OF TWINS.
QUESTION OF PRIMOGENITURE.

By J. G. WILSON, M.D., F.R.C.S.E.

Fellow of the Faculty of Physicians and Surgeons of Glasgow; Physician-Accoucheur to the Glasgow Lying-In Hospital, etc.

The following case appears to me not unworthy of record, on account of its rarity and its relation to obstetrico-legal Medicine:—

July 12, 1861.—This morning, at four o'clock, I was hastily summoned to attend Mrs. ——, who was reported to be in labour. On my arrival, my patient at once informed me that she had, twenty minutes previously, given birth to twins, when quite alone, her husband being away in search of the nurse; there was no one present to render any assistance. On examination I found two fine healthy male children lying struggling under the bed-clothes. From their position it was impossible to determine or decide which of the two was born first. Both infants were lying on their backs, and equi-distant from the vulva, with their heads directed towards the foot of the bed; from which latter circumstance I inferred that the presentation was in both instances natural. I divided the cords (both of which were greatly on the stretch) and removed the placentæ. No satisfactory inference or conclusion as to the seniority of the infants could be drawn from a careful examination of the placentæ, as regards situation or position. The patient states that the one child was expelled almost immediately after the other, but is entirely ignorant as to which of them was first born, although she presumes that the larger of the two must necessarily, from the difference in size, be the oldest. The mother has made an excellent recovery, and both children are in the way of well-doing. This patient stated to me, a month prior to her confinement, her impression that she would give birth to twins

Remarks.—In the foregoing case it will be observed, that the patient gave birth to twin male children when alone and by herself. In connexion with such an occurrence, the question naturally suggests itself, Which of these two children is the oldest? In this case the determination of such a point, supposing it were possible, is a matter of comparatively little moment. Such an event, however, occurring under circumstances involving a title (as in the peerage, for example, or succession to an estate, property, etc.), would assuredly lead to great difficulty and embarrassment.

Glasgow.

The Hour of Death.—Dr. Argenti, of Padua, has been amusing himself by endeavouring to ascertain at what hour death most frequently takes place. From observations on 1947 individuals, it results that the deaths preponderate somewhat in the post-meridian period over the ante-meridian, the greatest number occurring at 11 o'clock at night, the greatest number in the day also occurring at 10 and 11.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.
Assistant-Physician to the Metropolitan Free Hospital.

CASES OF TRACHEOTOMY.

ST. BARTHOLOMEW'S HOSPITAL.

CROUP—TRACHEOTOMY—DEATH FOUR WEEKS AFTERWARDS—AUTOPSY.

(Under the care of Dr. FARRE.)

For the notes of the following case we are indebted to Mr. Rogers, House-Surgeon to the Children's Hospital, late House-Surgeon to St. Bartholomew's Hospital:—

Jane H., a delicate-looking child, aged two years and three months, was admitted on June 30 for croup. There was no false membrane at the back of the fauces, but the parts were red and inflamed, and the difficulty in breathing was great. According to the mother's statement it would appear that the child's illness began on the 28th with drowsiness and profuse perspirations. During the night she was very restless, and about five a.m. shortness of breath came on. Emetics were prescribed, and stimulating liniments applied externally. She, however, grew worse, and at eleven p.m. emetics were again given which answered slightly.

Dr. Farre prescribed an emetic of sulphate of zinc (eight grains), but with no decided effect. As the dyspnœa was extremely urgent, the child being quite livid, Mr. Rogers was sent for to perform tracheotomy. The chest had been examined, but appeared free from disease. Great relief was afforded by the operation, and the child soon dozed off to sleep. Five drops of ipecacuanha wine and five drops of antimonial wine were given in almond mixture every six hours.

July 1.—She had a good night. She had been able to expectorate pretty well. On the 2nd she was still lingering. On the 3rd the tube was removed, but the distress and dyspnœa were so urgent that it was necessary to re-introduce it. In the evening of the same day the tube was coughed out. A Fuller's tube was introduced, and this kept in pretty well. Wine three ounces.

On the 6th the tube was removed, and the parts were getting inflamed and irritable. After it was taken out the child seemed to breathe freely. For several days, when she drank, some of the fluid would pass out of the wound. In order to prevent this, pultaceous food instead of fluid was given. On the 7th she was improved, took food better, and breathed easily; but on the 8th her breathing became worse, and in the evening was very urgent. She became listless and took very little notice of what was passing around. When counted in the afternoon, the respirations were 70. Pulse 168. Wine four ounces.

9th.—Half a drachm of liquor cinchonæ was given every six hours.

On the 10th there was no improvement. She continued very listless, and had become very irritable. Some aphthous spots were discovered about the fauces and tongue, and the wound exhaled a fetid odour. The left lung posteriorly was dull below, and there was bronchial breathing. On the right side there was dulness below, but no bronchial breathing. Pulse 150. Respirations 64. She still took her food badly. On the 11th she had an injection of beef-tea, with an ounce of wine, and on the 12th another of beef-tea, in which was beaten up an egg. Two minims of laudanum were also added to it. The enemata were retained, but no improvement seemed to follow, until the 18th, when she was slightly better. At 1 a.m. of the 23rd, she was suddenly seized with extreme dyspnœa. She was almost pulseless, her extremities cold. Mr. Rogers introduced a pair of dressing forceps into the trachea, and removed a quantity of mucus. A beef-tea and wine injection was given, and a linseed meal and mustard poultice was applied to the upper part of the chest. After this the child seemed much revived, and about 9 a.m. the breathing seemed quite easy. The wound was contracting, and she took a good breakfast.

25th.—About 8 p.m. a sudden attack of bleeding from the wound came on, and the child died. About two or three tablespoonfuls of blood, according to the sister's account, were lost. During the day the child had been very peevish and fretful, and had refused to take food. It would doze off to sleep, and then awake and remain very peevish.

For the last week it had been noticed that a large quantity of pus, sometimes amounting to a large tablespoonful, would every morning escape from the wound. Sometimes it was so great as almost to threaten suffocation. At the time of her death she was in a state of great emaciation, although strong beef-tea injections with wine were administered every day.

Autopsy, Fifteen Hours after Death.—On making an incision from the lower end of the wound downwards, an accumulation of pus beneath the left sterno-mastoid muscle was noticed. After removing the sternum and tracing down the purulent matter, a large abscess was found occupying the whole of the anterior mediastinum. There was a large quantity of clear fluid in the pleuræ. The posterior wall of the trachea was very vascular, and presented numerous small ulcerated patches. Close to the posterior wall there was a clot of blood, which seemed to proceed from one of the vessels in the neighbourhood. It was, however, impossible to ascertain this with certainty, as all around there was a great accumulation of pus. There was another abscess higher up, by the side of the thyro-hyoid membrane. There was no communication with the other purulent collections. The wound was much contracted. The air tubes, nearly as far as the minutest ramification of the bronchi, were found to be quite vascular and congested, and there was a viscid semi-puriform fluid lining them. There were pleuritic adhesions on both sides. The lungs were emphysematous, and also contained purulent deposits. The visceral and parietal layers of the pericardium were quite rough, and presented the appearance of recent pericarditis. On the surface of the heart there was a good deal of puriform lymph effused. The aortic and pulmonary valves were healthy.

KING'S COLLEGE HOSPITAL.

DISEASE OF THE LARYNX—TRACHEOTOMY—RECOVERY—RELAPSE OF THE DYSPNŒA—TRACHEOTOMY FOR THE SECOND TIME—RECOVERY.

A man, aged 52, was brought into the theatre, in order that the trachea might be opened for the second time, for the relief of dyspnœa. The man had been admitted during the past winter for some disease of the larynx, of uncertain nature. It interfered very much with respiration, and suffocation was threatening. Over the larynx there was a swelling as if an abscess, connected with diseased cartilages, was coming to the surface. The lungs were carefully examined, and no indication of disease was found in them. Mr. Fergusson, therefore, last winter performed the operation of tracheotomy, and with the most marked benefit. The respiration improved at once, and the swelling over the larynx disappeared. He was at length able to dispense with the tube, and was discharged several months ago. He came occasionally to the Hospital to show that his breathing was easy; but three or four weeks ago, the laryngeal symptoms returned, and at the time of the present operation (April 27), were such as to lead to the fear that a slight additional embarrassment of respiration might prove fatal. He had as much difficulty as before the first operation, each inspiration being attended by a rough, roaring sound. Mr. Fergusson opened the trachea and introduced the tube very quickly. He remarked, however, to the students present in the theatre, that they need not go away with the idea that the operation of tracheotomy was a simple one. In this case the patient, a thin man, had a long neck, and kept very quiet during the operation. The operation was often very difficult in younger persons in whom the neck was short and fat, and in cases in which there were enlarged veins or enlargement of the thyroid body, and when the patient was very restless from dyspnœa.

Mr. Fergusson also showed the tube which he introduced into the trachea. The ordinary tube, he said, with the broad open end, was somewhat difficult to introduce. The one he showed consisted of two lateral valves, which by pressure came together at the apex, and in this position was most easily introduced. An ordinary tube could then be introduced betwixt them so as to ensure a free opening.

The operation was followed by immediate relief, the roaring ceasing, and the breathing becoming easy. He was discharged in greatly improved health on May 29, but was still wearing the tube.

August 15.—Mr. Fortescue, House-Surgeon to King's College Hospital, informs us that the patient has since presented himself at the Hospital several times. He appears in tolerable health, and free from any uneasiness; but still wears the tube.

THE LONDON HOSPITAL.

SCALD FROM DRINKING BOILING WATER—TRACHEOTOMY—DEATH SIX DAYS AFTER.

(Under the care of Mr. HUTCHINSON.)

[Reported by Mr. WOODMAN.]

Patrick S., aged 2½ years, was admitted December 13, 1860. His father stated that, twelve hours before, the child had drunk "boiling water" out of a tea-kettle which had been just removed from the fire. The child's face was flushed, skin hot, pulse rapid and small. Respiration was performed with great difficulty, and with a sert of brassy sound, like that of croup. It was hurried (30 per minute), but auscultation showed that air entered the lungs with tolerable freedom. There were no external marks of scalding, but the inside of the mouth and tongue had evidently been acted upon by very hot, though probably not boiling fluid. The child was evidently in great pain, and pointed to his throat, but drank eagerly some milk which was given him. Leeches and warm fomentations were applied to the throat, and a mixture containing tartar emetic was directed to be given frequently. The dyspnœa, however, increased, and a room was, therefore, prepared, by heating it to 70° F., and keeping the air moist by damp cloths, &c., in case tracheotomy should be necessary.

At 2·30 a.m. on the 14th, about six hours after admission, and eighteen since the accident, the difficulty of breathing became extreme. No air could be heard entering the chest, and the child's efforts to breathe were painful to witness. Mr. Finch, the House-Surgeon, then performed tracheotomy. The opening into the trachea was made by a trocar. The operation was somewhat tedious, as the trachea lay deep, being covered by a good deal of fat, and there was considerable hæmorrhage. The moment the trachea was opened air could be heard to rush in, and the child, greatly relieved, fell asleep in a few minutes. The double tube, as usual, was tied in, and the room assiduously kept to the same temperature and moist. At first there was a little frothy blood, occasionally filling the tube; but this was soon replaced by a viscid, half solid material, like that expectorated in croup. The House-Surgeon, Mr. Finch, and the dressers, Messrs. Appleyard and Woodman, took turns to watch him, so as to ensure that the tube was constantly patent. It was found that one of the little flexible brushes used for cleaning tobacco pipes cleaned the tube better than anything else. Towards morning the child awoke, and made signs for drink. Milk was accordingly given. Next day he seemed better, and eagerly took milk and beef-tea. He continued to improve for the next three days, but the tube was still clogged very frequently with the same tenacious material. He was troubled with a cough, and rather coarse crepitation was heard over the whole of the chest. On the evening of the 12th he began to breathe through the mouth, but was rather feverish, and seemed exhausted. Some wine was given him, which seemed to rally him. On the 13th he breathed with tolerable freedom through the mouth, but the tube appeared to irritate the trachea. Mr. Hutchinson accordingly directed its removal. Soon after he coughed up a good deal more of this membranous matter. Towards evening he became exhausted, and died on the morning of the 20th at 6 a.m., six days after the operation.

At the post-mortem the glottis as well as the mucous membrane of the larynx and trachea was found much thickened; the larynx and trachea were much congested. The wound was healthy; the opening was between the cricoid and the first ring of the trachea. The lower part of the trachea and the larger bronchi were found blocked up by the crupous matter previously described, whilst the smaller bronchi were loaded with muco-purulent matter. Portions of the lung-substance appeared congested, but a good deal was apparently condensed. The pharynx was somewhat congested, but the œsophagus was but little affected.

GUY'S HOSPITAL.

ABSCESS OF LARYNX—TRACHEOTOMY—DEATH FIVE WEEKS AFTER OPERATION—AUTOPSY.

(Under the care of Mr. COOPER FORSTER.)

[Reported by Mr. B. J. TUCK, House-Surgeon.]

J. W., aged 8, residing at Bethnal-green, was admitted under Mr. Cooper Forster's care on January 30, 1861. Four years ago he had scarlatina, followed by some disease of the eyes, which lasted nine months. Three years ago his face and the glands in the neck began to swell, and have continued swollen ever since. Nine days before admission he first had difficulty of breathing, preceded by hoarseness. The dyspnœa becoming urgent, he was brought to the Hospital.

He was a strumous-looking child. The face and glands of the jaw and neck were much swollen, but not congested. Dyspnœa was extremely urgent; speech and deglutition impossible. He was directed to take twenty drops of antimonial wine every two hours, but was unable to take it.

The same evening, the child appearing to be dying from suffocation, tracheotomy was performed by Mr. Tuck, and with immediate relief.

January 31.—He passed a comparatively quiet night. The inner tube required to be removed and cleaned every five minutes, owing to its being plugged with tenacious mucus. He was now able to swallow and to speak in an audible whisper.

February 11.—The tube was removed for a few moments, but it was necessary to reintroduce it lest the child should be suffocated. His appetite was good; he slept well. The swelling in the face was much diminished.

26th.—The child having, unknown to the nurse, taken out the inner tube, a scab got into the outer tube, and plugged it up. The boy then tore out this also, and was nearly suffocated, being apparently dead on the arrival of the dresser, who reintroduced the tube and performed artificial respiration with complete success. The next morning the child appeared as well as ever.

March 3.—Going on well.

4th.—While the inner tube was taken out to be cleaned, the outer tube got plugged with mucus, and again the child tore it out, dying almost immediately, being quite dead before the nurse could get assistance.

Autopsy.—A circumscribed abscess outside larynx, opening internally, just below the vocal cords on the right side, a piece of necrosed cartilage, nearly detached, being contained in the sac.

SYPHILITIC LARYNGITIS—TRACHEOTOMY—DEATH—AUTOPSY.

(Under the care of Dr. GULL and Mr. BRYANT.)

[Reported by Mr. BOOTH.]

Joseph W., aged 27, a groom, was admitted under the care of Dr. Gull, on November 14, 1860. For three years he had been suffering from repeated attacks of sore-throat. He had had syphilis three times, and three years ago he was in the Lock Hospital for two months. Two years ago, his throat was very sore, his voice was almost lost. He was blistered, and after a little while got perfectly well. He had another attack one year ago. Thirteen weeks since he was in this Hospital (Naaman ward), under the care of Mr. Cock for swelling of the face and for sore throat. His teeth were quite loose from mercury which he had taken before his admission. While in the ward he used to wash out his nostrils with some chloride of soda and water, which used to bring away some purulent matter. After remaining in the Hospital six weeks, he went out much relieved, his throat being quite well and his face having nearly resumed its natural appearance. He continued quite well until a fortnight ago, when the sore-throat returned, and his voice again

became hoarse, and gradually became worse until the present time.

November 14.—His breathing is very laborious. He spits up a great deal of purulent matter, probably half a pint in the last twelve hours. In his throat is a large ulcer just behind the position of the uvula (which has been destroyed). The upper margins of the glottis feel as if they were ulcerated, on touching them with the finger. The back of the throat is covered with a quantity of thick pus. It feels sore externally, just beneath the angle of the jaw. His breath smells very offensively, and he has great difficulty in swallowing his food. The right side of the face is slightly swollen. He says that his uvula was burnt off by caustic twelve months ago, having been previously ulcerated. His chest is quite resonant on percussion. Dr. Gull ordered—Acid nit. dil. ɱxx., ext. sarsæ. ʒj., decoct. cinchonæ, ʒij., ter, die., pulv. Doveri, gr. x., omni. nocte., and a liberal diet.

19th.—He complains of sickness and headache, and suffers under great dyspnœa. His voice is very low, and his chest seems to expand very slightly in inspiration. A blister to the throat.

21st.—He thinks his throat is not quite so sore, and he swallows his food a little better. The dyspnœa is not very great.

23rd.—He has had a linseed poultice applied to chest. The throat looks much the same, but cannot swallow his food so well, and expectorates a great deal of purulent matter.

24th.—Not being any better, and the dyspnœa very great. Mr. Bryant was requested to see him, and as suffocation was approaching, he performed tracheotomy.

25th.—He is very much easier, and is breathing quietly.

27th.—He feels much easier, and does not feel much pain. He is able to swallow now, being unable to do so yesterday and the day before, the food going into the trachea. Until to-day he has been fed by injections of beef-tea every six hours.

29th.—Going on very nicely. He is breathing quietly, and has no pain. Pulse eighty-two, rather feeble; tongue slightly furred. On examining the fauces, all ulceration had ceased, and the surfaces appeared healthy.

He went on well for some time, and was discharged, but later, the discharge from tube and the breath became very offensive, and finally, pneumonia set in, of which he died January 19. The tube was removed the day previous, as he breathed better without it.

Autopsy, by Dr. Wilks.—The epiglottis quite gone. The glottis was thickened by inflammatory deposit. In the pharynx were cicatrices and warty prominences, but no actual ulceration. The artificial opening in the trachea was just below the cricoid. Below this the tracheal mucous membrane was highly inflamed, of dark purple colour, and in parts of a greenish hue, and was filled with purulent secretion and slightly adherent patches of lymph. The tubes throughout were in like condition, of dark greenish purple hue, and filled with mucus. The lungs were almost solid throughout, and in several parts gangrenous with a very strong fetid odour. The sections of most parts showed old lobular consolidations, being speckled with a number of small white masses of hepatised tissue. The intervening structure was in a state of red hepatisation. There were large masses of lung also which had been wholly consolidated, and now breaking down. In the upper part of the left lower lobe, was a large sloughing cavity. The pleura over these parts was covered with a layer of lymph.

GREAT NORTHERN HOSPITAL.

LARYNGEAL PHTHISIS—TRACHEOTOMY—DEATH—AUTOPSY.

(Under the care of Dr. LEARED.)

[Reported by Mr. WALLIS.]

Charles B., aged 26, a tall, slightly-built man, was admitted on May 13, 1861. About two years previously he spat up, after a fit of coughing, half-a-pint of bright blood. A slight cough had existed for some time previously, but he stated that he subsequently enjoyed very goed health for some months, until March, 1860, when he caught a severe cold, with sore-throat and hoarseness, and the latter symptoms continued about two months. In the following November, having taken cold from a wetting, the same symptoms returned in a more severe form, so that he could only speak in a whisper; there was also persistent difficulty in swallowing. Of late he has lost flesh, and sweats a good deal at night. Cough not troublesome except at night. Expectorates tenacious muco-purulent matter, but there has been no blood brought up since the first occasion. Considerable tenderness on pressing the thyroid cartilages, which appear somewhat thicker and larger than natural. Mucous membrane of throat congested, and covered with tenacious mucus. Breathes with difficulty, and with a loud wheezing noise. Strength greatly exhausted by the constant dyspnœa. The anterior part of the chest was everywhere natural on percussion; the respiratory murmur was harsh at the upper part of both lungs, but the examination was difficult, owing to the loudness of the laryngeal sounds. States that he never had syphilis.

Before admission iodide of potassium had been taken for a considerable time without any benefit, and when in the Hospital, owing to the urgency of the symptoms, mercury was cautiously employed, so as just to affect the gums, and at first it seemed to be attended by good results. Blisters over the larynx were of little benefit. The application of solution of nitrate of silver (ʒj ad ʒj) to the interior of the larynx afforded more relief than anything, and the operation had been frequently repeated by Dr. Leared at the patient's request, before his admission.

On May 26th he had taken his meals as usual during the day, and in the evening conversed with his wife until 5 p.m., when she left. He shortly afterwards fell asleep, but about 6 o'clock he suddenly awoke coughing, and rose up, struggling violently for breath. Mr. Wallis, the House-Surgeon, was now called to him, but in a few minutes after, he fell backwards, apparently dead. Mr. Wallis now lost no time in performing tracheotomy; a pair of curved polypus forceps having been introduced into the wound, with which it was kept dilated, while respiration was assisted by alternately compressing and relaxing the sides of the chest. These endeavours were rewarded, after a period estimated at two minutes, by the patient making a deep gasp, when respiration was slowly continued, aided by the artificial means, for about half-an-hour. The patient now coughed through the wound a quantity of blood and mucus, together with a fibrinous material, about four inches long, and the thickness of a goose quill. He was now able to breathe with comparative freedom, and a tube was introduced. In two hours after the operation the respirations were seventeen in the minute, pulse hardly to be felt, pupils fixed and dilated, has had severe convulsive fits, with foaming at the mouth, resembling epilepsy.

27th, 11 p.m.—Repeated convulsive fits during night, but they have diminished both in frequency and violence; countenance clearer; lips of natural colour; lies in a semi-conscious state, but swallows beef-tea and brandy. Respirations 32 per minute; pulse 140.

28th, 10 a.m.—Has had some sleep during night; is now quite conscious, and attempts to speak. Respirations 38; pulse 140.

7 p.m.—Is restless and wandering, catches at imaginary objects, and attempts to get out of bed; refuses to take nourishment. Ordered injections of strong beef-tea and brandy frequently repeated.

29th, 2 p.m.—More composed at times; knows those around him; has coughed a considerable quantity of blood and mucus through the tube. Respirations, 40; pulse, 152, and very feeble. Continue injections.

30th, 1 p.m.—Tranquil, but seems unconscious; refuses to swallow. Continue injections.

7 p.m.—Respirations very rapid; pulse hardly perceptible; is evidently sinking. Died at 11 p.m.

Post-mortem, Thirty Hours after Death.—Body emaciated. On opening the chest, the cellular tissue of the anterior mediastinum was found emphysematous, and the emphysema could be traced to the wound, thereby showing its origin. The apices of both lungs were adherent to the walls of the chest. The lungs were also much congested, and their summits, especially that of the left, contained small scattered masses of tubercle. There were also a few very small abscesses. Calcareous deposits also existed in the lungs, and one the size of a marble was found in the bifurcation of the trachea. The bronchial tubes, trachea, and larynx contained a large quantity of bloody fluid. The entire mucous membrane of the larynx was destroyed by ulceration, the carti-

lages being in places quite exposed. The epiglottis was thickened, but unaffected by ulceration.

Dr. Leared observed that the case must be regarded as one of laryngeal phthisis, but that its history, as well as the post-mortem examination, proved that the very rare occurrence of death from the laryngeal affection resulted from the ravages of the latter having outstripped that of the tuberculization of the lungs. It seemed probable, from the number of cretaceous deposits in the lungs, that some progress had even been at one time made towards spontaneous cure. The fibrinous mass appeared to be the result of exudation from the interior of the larynx or trachea, and its sudden displacement undoubtedly caused the asphyxia, which would have proved fatal but for the timely operation.

Medical Times and Gazette.

SATURDAY, AUGUST 24.

MEDICINE AMONG THE MORMONS AND THE INDIANS OF NORTH AMERICA.

It may be remembered that in the Autumn of 1858 the United States sent a military expedition to Utah against the Mormons. The Reports (a) of the Surgeons who accompanied the expedition and saw something of Mormon life, are of great value, as showing the effects which complete isolation and a gross religion, whose very essence is Polygamy, have produced on the physical stamina and mental health of that saintly community.

Among the males, sexual debility, with its concomitant evils, is stated to be the most common result of this premature stimulation of the sexual passion, and the facilities of gratifying it. Among the women these same causes show their pernicious effects, not in diminution of generative power, but in physical deterioration of the offspring. The women are even remarkable for their fecundity, but their children are ill-nourished and cachetic, a large proportion of them dying in infancy, and those, who *do* live to maturity, looking feeble, sickly, stunted, and (the males) emasculate. Mormonism appears to have made its impress on the countenance in a remarkable manner. "There is an expression of countenance," says one of the Surgeons, "and a style of feature which may be called the Mormon expression and style—an expression compounded of sensuality, cunning, suspicion, and smirking self-conceit. The yellow, sunken, cadaverous visage; the greenish-coloured eyes; the thick protuberant lips; the low forehead; the light, yellowish hair; the lank, angular person, constitute an appearance so characteristic of the new race, the production of Polygamy, as to distinguish them at a glance. The older men and women present all the physical peculiarities of the nationalities to which they belong; but these peculiarities are not propagated and continued in the new race; they are lost in the prevailing Mormon type."

The Mormon faith inculcates that diseases can be cured only by miraculous interposition; consequently, the secular professors of the healing art are not much patronised. "The Church authorities are exceedingly jealous at an attempt to cure by ordinary therapeutics, and denounce from the pulpit any invasion of their special province. Though they claim for the laying on of hands wonderful efficacy, the number of deformities—the result of malpractice, to be seen in any of the populous towns—rather indicates a necessity for the use of carnal means. The art of Surgery is at a low ebb."

The only disease peculiar to the Utah Territory is what is called in the Reports "Mountain Fever." The minute descriptions given of this disease leave no doubt in our mind that it is nothing more than a form of periodical fever, modified by elevation and other hygienic conditions. The persons who most suffer from it are the trappers and Indians when following the rivers to their mountain sources for the purpose of trapping beaver. With this exception, no diseases of a severe character prevail in the Territory, the climate of which is unrivalled for healthiness. In the different Reports much uncertainty is expressed whether this "mountain" fever owns the same cause as ordinary intermittent fevers; but when we read the topographical descriptions of the localities where it prevails and the seasons to which its prevalence appears to be restricted, we cannot for a moment doubt that both kinds are attributable to the same, and to no other, efficient cause, viz., marshy ground in the process of drying under the influence of solar heat.

The Reports of the Army Surgeons, located at the various military posts in Utah, state that the climate of that country exercises singularly beneficial effect upon phthisis. They were stationed in that territory from the autumn of 1857 to the spring of 1859, a sojourn long enough to render their observations, both on this and on other matters, worthy of our credit.

The Utah Territory has an average elevation of about 6000 feet above sea-level. It consists of ranges of hills, with intervening broad table lands, valleys and streams. What renders its climate remarkable is its *equability and dryness*. Although strong south-westerly winds are almost constantly prevalent, and the range of temperature in the course of the year is considerable (from about 90° in summer to about 20° in winter), *sudden vicissitudes* of temperature are very rare; the summers being regularly hot and the winters regularly cold. The absence of moisture is indicated by the hygrometer and by the freedom of arms and Surgical instruments from the slightest traces of rust. The great dryness is stated to render the extreme cold much less appreciable to the senses, so that a smaller amount of clothing is necessary than in latitudes warmer but moist. Such being the nature of the climate, the Reports show that the prevalence and mortality of phthisis are much less at the Utah station than at any other military district in North America. In 1858, out of 5842 men stationed in Utah, only eight cases of phthisis occurred and only one of these proved fatal. The freedom from pulmonary complaints of *all* kinds in this country is equally remarkable. That this comparative immunity from phthisis, and lung disease generally, is due rather to peculiarity of climate than mode of life seems clear from the fact that those, on whom the observations have been made, are soldiers—a class of men whose habits are much the same everywhere. So notorious is the healthiness of these high regions of the far West, that the subjects of hereditary or acquired predisposition to phthisis or scrofula, as well as other invalids, have for sometime past been largely migrating to them, as being the climate of all others in North America the most suitable for their maladies. The journey across the plains from the Atlantic States is not now nearly so formidable an enterprise, as it was a few years back. Along the great roads constituting the overland route to California, the journey to the West can now be accomplished without danger or delay. So much for Utah, its inhabitants, diseases and climate. We will now turn to some of the adjacent Indian tribes of North America, concerning which we find several interesting details in the Reports before us.

Intemperance and disease, especially syphilis, scrofula, phthisis, small-pox, cholera and fever—coupled with the evils incident to a state of almost perpetual warfare—are said to be slowly exterminating the aboriginal inhabitants of North America. Another influence, tending in the same

(a) "Statistical Report on the Sickness and Mortality in the United States Army from 1855 to 1860." Washington.

direction, is the steady advance of civilization, the restraints of which are incompatible with the nature and habits of these children of the forest. As the Indians will not blend with civilization, they must recede and dwindle away before its onward progress. The Indian, when his natural habits are interfered with, "feels himself a prisoner and deprived of his dearest rights, his spirit is broken, and with the change of diet and wearing apparel, and being deprived in great measure of his natural exercise, disease takes hold of him and he sinks under it. As a general thing, deprive an Indian of his accustomed exercise and give him plenty of beef and flour, he gets dysentery; and when he changes his wearing apparel, laying aside the open blanket and putting on the white man's tight coat, and lies down to sleep, his lungs take on disease and soon become full of tubercles." Such is the testimony of the American Surgeons who have lived among them and closely watched their ways.

The Indian tribes are said to have no regular Physicians among them. The "Medicine man" is a sort of half priest, half doctor, who possesses mysterious remedies and is regarded with superstitious awe. Among many of the tribes, especially those on the frontiers of civilization, there are swarms of travelling charlatans and heartless quacks, who ply their trade with success proportioned to the unbounded credulity of the buyers of their vile nostrums. Phthisical patients are generally left to their fate. Phthisis is one of their commonest diseases, and as it is regarded by the majority of the Indians as communicable by contagion, especially among the family of the afflicted individual, the poor sufferer has to drag out the most miserable solitary existence, till death relieves his sufferings. Barring the use of a few inert remedies of a domestic nature, disease in the majority of cases is left to run its course. Some tribes, on the other hand, adopt methods of treatment altogether the reverse of the expectant. The New Mexican Indians, for instance, suffer much at certain seasons of the year from intermittent fever; and for the cure and prevention of this disease large numbers of them assemble once a year (in the spring), and for the space of three days swallow frequent draughts of the infusion of some powerful herb, which causes violent vomiting and purging. This is called a "Medicine Feast" and is supposed to cure the fever where it already exists, and to fortify the system against its attack during the ensuing summer and autumn. Whether as a curative or as a prophylactic measure it is attended with any success, is not stated.

The New Mexican Indians have another annual gathering, a "feast" of a more truly festive description than the one just mentioned. It takes place in the winter, on the mountains, when "they distil a nasty, filthy kind of liquor from corn, which is known among them as *tiswing*, of which they are passionately fond, and never lose an opportunity to get gloriously drunk, whenever a little corn can be procured to make it from. Their mode of distillation is as novel as it is simple. The corn, procured by stealth, or as a 'forced loan,' is steeped for twenty-four hours, then placed between the scanty folds of the family couch to ferment (a) beneath the bodies of the lusty warriors, whose slumbers are soothed by bright dreams of 'the good time coming,' when all shall be assembled at the festive wigwam to partake of the intoxicating pleasures of this unpretending beverage. The malt is now coarsely ground, a certain amount of water added to it, then placed in earthen vessels and allowed to ferment for forty-eight hours, at the end of which it is used without straining or any other process. The better to enjoy 'the feast of reason and the flow of soul,' these votaries of Bacchus prepare themselves by a solemn fast of forty-eight hours previous to the commencement of the festal joys, for the purpose of enjoying the most profound spiritual impressions —in other words—they get 'right royally drunk' on empty stomachs. Were it not for this precaution, the mild character of the beverage would fail 'to make the drunk come.'"

(a) The write evidently means 'to germinate."

The Oregon and many other Indians have one chief remedy for all internal diseases. This consists of a hot vapour-bath followed immediately by a plunge into a cold stream. Such is their mode of treating small pox, for instance; the result in almost every case is stated to be fatal.

The North Californian Indians treat disease in a manner totally different from that of the Indians east of the Rocky Mountains. They resort neither to the animal, nor the vegetable, nor the mineral world for a cure. "Their philosophy of disease is based upon the idea that an evil spirit of some dead Indian steals into the body and locates itself, and wherever the pain may be, there the spirit is. Their system of therapeutics is perfectly compatible with their notions of pathology. Their Doctors are always females, and none are called to practice except those who are commissioned as it were by Nature. When a young squaw chances to have a slight periodical hæmorrhage from the mouth or any other part than the natural channel—in other words, if she should have vicarious menstruation,—she is the one who for ever after is destined to heal the sick. The young squaw in not at all covetous of her calling; she dreads her profession, for on her failure to effect a cure, she loses her life. Her art of medication consists in working herself up into a Mesmeric or hysterical condition, and then making gentle passes over the part diseased, and lastly plunging her fists into the museles of her prostrate patient, as if she were really determined to tear out and expel the dead Indian's evil spirit in good earnest. Then, again, the Doctress throws herself into a gladiatorial position, being surrounded by a dozen or more 'bucks,' who assist in the performance by chanting and howling like so many demons; and then she throws herself with her whole weight on her subject, clinching the part diseased, and if she is lucky she drags out the evil spirit (with a portion of the patient's skin), and dashes it into a vessel of water ready for that purpose. If the patient is satisfied that he is relieved of the dead Indian's spirit and the pain, all is right; but if the pain chances to return, the poor squaw loses her head under the tomahawk."

The climate of California would appear to be singularly healthy and invigorating. In one of the Medical Reports for that country, it is mentioned as a notorious fact that when females from the Atlantic, or from the inland States, go to live in California, their uterine functions assume a greatly increased activity; that menstruation becomes much more copious; that those who have been barren for years, and those who have never been pregnant at all, after a short residence in their new climate, are almost certain to become "joyful mothers of children." The venereal propensities of the other sex are said to derive a fresh impulse under the same circumstances. It is further stated, as a matter of fact, that the fecundity of cows, sheep, and pigs, greatly increases, if they are brought from the plains of the interior to the Californian coast. We should receive such a statement with great distrust, were it not made in such an unhesitating and unqualified manner by a Medical gentleman in the United States Army, whose residence in the country must have given him abundant opportunities for investigating the truth of the matter.

Child-bearing among the Indians is stated to present the same delays and accidents as among the civilised inhabitants. In tedious labour pressure is made on the abdomen with the hand, and, if this does not expedite matters, a hoop is placed round the waist, and forced downwards. Hence we are not surprised to hear that prolapsus uteri is so common among them.

Syphilis is exceedingly rife among the Indian tribes, but

more so in the Southern than the Northern parts of the continent. Two reasons are assigned for this in the Report:—(1) From the middle of the sixteenth century up to the present time, the Spaniards have been mixed up with the Aborigines, and have freely sown the seeds of the disease among them. (2) The Spaniards seldom visit the Northern parts, and if they do, the colder and purer climate renders the virus less infectious and more likely to give way under the influence of natural causes. The Northern and central tribes believe the disease to have been disseminated among them by the Hudson-bay traders,—not under the natural impulses of sexual passion, but with the "pale-faced," cold-blooded design of undermining their strength and thinning their numbers. Scoundrels as many of these traders undoubtedly were, one is loth to impute to them such villainy as this.

So terrible have been the ravages of syphilis, that the Indians of New Mexico have had the wisdom to adopt penal measures, which are found greatly to check the spread of that disease. Any member of their tribes, who is known to have contracted the disorder, is either tomahawked forthwith, or, like the leper of old, excluded from all intercourse with his cleaner fellow-men, and abandoned generally to die of starvation. Dread of a punishment, so certain and so terrible, makes them cautious about exposing themselves to the chances of infection.

The following novel mode of treating retention of urine is related in one of the Reports:—In 1857 an unfortunate half-bred Frenchman applied to the Surgeon at Fort Randall, in Nebraska, for the relief of stricture of his urethra, which had been caused by gonorrhœa contracted twelve months previously. He had suffered several bad attacks of retention, and on one occasion had been obliged to have recourse to the skill of an Indian Doctor, whose mode of treatment, whatever may be said against it, possessed, at least, the triple merit of novelty, simplicity, and success. The Doctor applied his lips to his patient's penis, and by repeated vigorous efforts at suction, drawing off a *bon-bouche* at a time, managed at last completely to relieve the enormously distended bladder. It had been previously stipulated that the poor Frenchman, as a consideration for the service performed, was to give the Doctor his only horse. We have heard of the Hindoo Surgeons using suction for extracting a cataract after incising the cornea; but the above application of Nature's suction-pump for the relief of suffering humanity struck us as an idea truly original, though we have since seen, in an old number of the *Gentleman's Magazine*, that an English Surgeon performed the same office for Ferdinando, one of the Earls of Derby, in the seventeenth century. We place the hint at the disposal of the Profession. The ingenuity of some enterprising Surgical mechanist may, perhaps, turn it to account and reproduce it in some more palatable form, such as the exhausted glass air-chamber used by Sir Philip Crampton to remove fragments of broken calculi with viscid mucus from the bladder after lithotrity, or the powerful syringe we have ourselves used for the same purpose.

THE WEEK.

Some months ago, we reported the particulars of a case in which death was caused by an injury to the spine, with no sort of history as to the mode in which the injury was inflicted. A still more mysterious case of the same kind has occurred near Guildford. A middle-aged man, named Port, was at a fair with his wife, his daughter (a girl aged twelve), and a man named Colverwell. He left the fair certainly not intoxicated, although he had had a little to drink; and set out to go home with his party in the evening, about ten o'clock, on July 22. They were walking in single file through a field, Port at the head of the party, his daughter next, then his wife, and lastly Colverwell, when, just as they reached the gate, Port fell backwards, flat on his back; and when his friends came up to him, said, "There is no feeling in my hands, or legs, or anything." Mr. Eager, the Surgeon, was quickly fetched to him, and ascertained the fact of spinal paralysis, and had him removed to his home, where he died in forty-eight hours. A post-mortem examination, made by Mr. Eager and Mr. Taylor, discovered fracture of the arch of the sixth cervical vertebra, with a good amount of extravasation in all the tissues, from the skin to the seat of injury. But there was no injury nor abrasion of the skin. Of course an inquest was held, but the result is that the case is utterly unexplained. Taking the physical phenomena, the most natural supposition would be that the poor man had received a heavy blow on the seat of injury, which caused the fracture, the fall, and the death. Against this must be placed the facts, that the man himself was quite sensible, and that he felt no blow. He said that "he was suddenly seized with paralysis of the arms and legs, and fell in consequence." Then his daughter, who was close behind him, swears that he was not struck; so do his wife and Colverwell. Moreover, there were other persons in the field, close at hand, and although it was rather dark, they saw the poor man fall, but did not see any blow struck. The hypothesis was started that the fracture might have been occasioned by the fall; but, besides the extreme improbability of the notion that a man falling flat on his back would fracture the sixth cervical vertebra, we are left without any explanation of the reason why he fell, and are encumbered with two hypotheses instead of one: besides that, the poor fellow said he was "taken all at once," and fell as a dead-weight flat; whereas he made no complaint of having injured his neck by the fall. The only conclusion that we can come to is, that the man did receive a heavy blow, which fractured his vertebra, deprived him of sensation, and was itself unfelt; for, we repeat, the fact remains that the man, whilst thoroughly conscious, did not feel the blow which fractured his spine, whether that blow was, as we believe, the first and single cause of the phenomena, or whether it arose from contact with the ground after the man had been paralysed, and made to fall by some hypothetical cause unknown. Of course, the agent by whom, and the instrument by which, the violence was effected, are things out of our province to explain, still less the fact that such an injury could have been inflicted without being known to the persons who were close by at the time.

The *Morning Chronicle* has some severe—though everyone will feel not too severe—observations on the conflict of Medical testimony and evident partisanship of Medical witnesses. Last week we noticed a railway accident case. This week there is a will case; the usual example of a crusty and eccentric old bachelor, who hated Doctors, called parsons "rogues and vagabonds," cut his nephews, and left his property to what is strangely called—considering the circumstances—"a charity." After hearing accounts of various eccentricities, three mad-Doctors "had no hesitation" in pronouncing the testator mad, in the teeth of the testimony of some of their *confrères*, who thought him sane. We will not enter into the mad question now, nor discuss the point how far eccentricity, particularly in the aged, is to be considered *per se* proof of insanity; but may quote the following passage on the scandal caused by *ex parte* testimony, and by the fact that it becomes the duty of an attorney who wishes to win his cause to go early into the market, and buy up the leading Medical authorities:—

"It is not every party to an action who can afford to pay ten or twenty guineas a piece per diem to half-a-dozen Physicians, who leave their patients to go into the witness-box, and support this or that theory, according to the view of the

party who fees them. We have hardly seen a single important ease, depending on Medical testimony, during the last dozen years, in which we have not had an array of members of the Faculty of Medicine on either side, swearing dead in eaeh other's teeth, and especially in lunacy eases. Now, suppose a failure of funds on the part of plaintiff or defendant, the probability is that he will be east, not from want of evidence, but from want of money to procure it. Thus a will may be invalidated, a man hanged, or a sane man committed to an asylum solely from want of money.

"This is a growing evil, and Medical testimony will soon become worthless, if it has not beeome so already, unless it is stopped. A ease oeeurred the other day, in which, upon a claim against one of our Railway Companies for damages in consequence of an accident, the testimony of a distinguished Physieian was brought forward on behalf of the Company to show that the injury the plaintiff had sustained was by no means as grievous as he wished to make out. But on cross-examination of the witness, it appeared that he had a general retainer from the Company, whenever an aecident occurred, to proceed to the scene of disaster and estimate what injury each passenger had sustained, as a guide for his employers in settling claims for compensation. It was clear that the testimony of sueh a witness was not worth much; that it was as much his business to make the matter light for the Company as it was the duty of the learned counsel they had employed to pooh-pooh the list of bruises, eontusions, and what not, on which the plaintiff founded his elaim. And precisely the same principle is at work wherever Medical men are put into the witness-box. They come there to support the view of the party who calls them, and from whom they receive large sums for giving up their day's praetice. They are, in the worst sense of the term, "interested witnesses," and with half a dozen swearing one thing and half a dozen swearing the direct opposite, a jury is far more perplexed in coming to a right verdict than if there were no Medical testimony at all."

Overwork, and its penalty, worn out brain and early death, are common enough amongst ourselves, but perhaps there is no better example of the beginning, middle, and end of sueh a ease than is afforded by the late Augustus Welby Pugin, the architect, and narrated in Mr. Ferrey's very interesting "Recollections of Pugin." He was "delieate as an infant;" when at sehool "he showed remarkable aptitude for acquiring knowledge," and whether "in Greek, Latin, mathematics, or any other branch of edueation, would learn in twenty-four hours what it took other boys many weeks to aequire;" he was quick, fluent in speeeh, voluble, dogmatic, and vehement in manner; he hated ehildren's society, and loved that of his elders. From his preeocity of talent, he was largely employed as an artist when a mere stripling, and was designing George the Fourth's furniture at Windsor when sixteen. He entered into business, set up an establishment of artist workmen, got into pecuniary difficulties, and was arrested when eighteen. He married; and was husband, father, and widower before he had completed his twentieth year. Then followed twenty years of the most intense excitement and exhausting labour; rapid journeys; a second and third marriage, and two, at least, most bitter disappointments in love between them; a ehange of religion, and a perfect tempest of controversial pamphleteering. Habits of life, of rapid and restless loeomotion, and of severe labour when at home; rising at six; two hours' hard work before breakfast, "whieh seldom lasted more than *seven minutes*;" hard work again till dinner, "when his fare was of the simplest description, without wine or malt liquor, and this meal generally lasted *a quarter of an hour*;" after dinner more work till bed-time; "when he returned from town he always wrote letters in the railway carriage." What wonder that at the age of forty he became irritable and nervous, and quarrelled with his oldest friends; or, as he described himself, "thin, trembling, hollow-eyed, changed, and yet working tremendously at times"? Soon after, meeting his Medical attendant at Ramsgate, where he lived, he told him a story of the foundering of five merehant ships, whieh was sheer hallueination; this was followed speedily by eomplete mental deeay and early death, just at the age when experienee begins to ripen, and a man's early work ought to bear fruit for himself, his family, and the world. Pugin is a man whose influence is seen and felt in every street and every house, in the substitution of the bold, pieturesque, Gothic outlines, and harmoniously-eoloured materials of modern buildings, for the monotonous pseudo-classic of the last generation; in the graeeful forms of domestic furniture, and the truer and more natural school of art. If he had worked less, taken more time to his meals, and quieted his brain with tobacco or wine, so as not to live so fast, he might, perhaps, have been living now.

The Social Seience Congress, held during the past week in Dublin, has proved a most suecessful meeting. Lord Brougham takes a hopeful view of the state and progress of society, and advocates gradual and tentative changes. He applauds the labours of the Ladies' Sanitary Assoeiation, whieh is affiliated as a branch of the Soeial Science Association. We publish elsewhere a brief report of the proceedings of the Department of Public Health—the seetion in whose transactions our readers will naturally be most interested—in whieh papers have been read on Vaeination, on Infant Mortality, the Dwellings of the Poor, and the Turkish Bath. During the same time, the Association of Medical Offieers of Asylums and Hospitals for the Insane has also held its annual meeting in the Irish metropolis, and a short account of the subjects brought forward will be found in our columns. The proceedings were of a practical character, relating to the position of the Association, and the good service which it is rendering to the Profession by advocating a more enlarged and equitable policy towards Medical Officers. The subject of one of the resolutions is especially deserving of attention. It refers to the anomalous and injudicious arrangement now existing, by which the Resident Medical Offieer is deprived of the control which ought more properly to belong to him as regards the treatment of the insane. The reeommendation, that the eircuitous and tedious proceedings which the Resident Medieal Offieer, however competent and skilful, is now obliged to adopt should be discontinued, and power given to him to deal with the requirements of each case as his own judgment and experience may suggest, while the Visiting Physieian is still retained as a consultant, seems based upon justice and common sense.

With the heat, the number of deaths from diarrhœa and its allied diseases eontinues to increase. Last week (ending August 17) they amounted to 223, about a fifth of the week's mortality. Out of the 223, it appears that 208 were deaths of ehildren, and 129 of these were under one year. We have conferred with various Medical Officers of Health, to whom the public and the Profession naturally look for information and protection under similar cirsumstanees, and learn that cases of *cholera*, of a genuine Asiatic type, are not unknown, though happily not fatal. In the Parish of St. George, Hanover-square, were three sueh cases in the month of July; although we learn that an increase of heat, with a decrease of precaution, would probably cause a eonsiderable mortality. What, it may be asked, are the immediate instruments of the mischief? The heat, no doubt, creates exhaustion, and some cases of diarrhœa in infants and in the aged, arise from exhaustion simply. The heat besides creates a perspiration which is liable to be checked and followed by vicarious discharge from the bowels. Heat gives pungency and intensity to all putrid emanations. How frequent these are in the houses of the poor is notorious. Any latrine frequented by twenty or

thirty persons, situated within a house, or in a narrow yard or area, close to the windows, the water supply to which is insufficient, or used up before the day is half spent, is sufficient to give off poisonous vapours enough to disorder all the inmates. There is evidence, too, that the emanations from alvine discharges are sometimes specifically contagious. From these it appears that abundance of fresh, pure air, is the great preventive of diarrhœa. The vulgar are apt to accuse fruit as the source of mischief; and there is no doubt but that fruit, or milk, or meat, if fermenting or decaying, are fully capable of creating diarrhœa. But it were a wickedness to insinuate that food, sound fruit and vegetables are pernicious. There is no doubt but that heat tells most perniciously upon infants who are *dry-nursed* or *brought up by hand*. The milk, and still more the vegetable food upon which they are fed, requires greater care than the poor will bestow to preserve it from turning sour. If, then, we are asked for the best remedies against summer diarrhœa, as it affects the lower orders in towns, we reply,—Pipe drainage, well-constructed closets with abundance of water, and a daily supply of chloride of lime to decompose any residual offensiveness, and good traps to sinks which should be well charged with water every day. The water-supply deserves a word, too; for it is not quite nice, even if wholesome, to store it in a tank immediately over a water-closet. Lastly, great indulgence in beer, on the plea of thirst, is much to be deprecated. Ripe fruit is better. Brandy-and-water also, though an occasional remedy, is suspicious when taken too freely as a preventive. The records of all public institutions tell us that diarrhœa is most prevalent on *Monday*, or the day after a *holy* day.

REVIEWS.

Die Anatomie des Ohres in ihrer Anwendung auf die Praxis und die Krankheiten des Gehörorganes. Beiträge zur Wissenschaftlichen Begründung der Ohrenheilkunde. Von Dr. A. Von Troeltsch. Pp. 106. Würzburg: 1860.

(*The Anatomy of the Ear in its Practical Application to the Diseases of the Organ of Hearing.* Contributions to a Scientific Foundation of Aural Medicine and Surgery. By Dr. A. Von Troeltsch.)

This little work of Dr. A. von Troeltsch, the well-known aurist of Würzburg, is one of the most valuable contributions to Aural Surgery which have appeared for some time. The Author, who is in large aural practice at Würzburg, has, during the last six or seven years, made a very considerable number of post-mortem examinations of the ears of persons who had been deaf during life, and others; and has, in the course of his observations, discovered many new facts of importance for pathological anatomy as well as for therapeutics. His method of making post-mortem examinations of the ear presents some differences from, and has, no doubt, certain advantages over, those commonly in use. According to the Author, it is not necessary in such operations to mutilate the head so extensively as is generally done. After the removal of the skull-cap and the brain, two vertical cuts with the saw should be made, one of them behind the mastoid process, the other through the alæ parvæ of the sphenoid bone and the middle of the zygomatic process down to the base of the skull. The lower jaw is then disarticulated, and the connexion between the atlas and occiput severed; all the parts which are of interest to the aurist are thus isolated—viz., the petrous portion of the temporal bones, the sinus transversi, the Eustachian tubes, and the mucous membrane of the pharynx, from the choanæ to the anterior surface of the vertebral column. The face, having thus lost its hold, sinks back towards the occiput; but the void may be easily filled up by straw or a piece of wood, which, if properly put in, prevents any considerable disfigurement of the head. The skin, with the concha, may then be separated from behind forwards, and the wound produced thereby, sewn together; so that the scientific duty of the aurist can be well combined with due regard to the feelings of the relatives of the deceased.

The separate removal of the temporal bones is not advisable. By so doing, the naso-pharyngeal cavity is only eliminated by fragments, and it is just this part where the origin of many diseases of the ear is to be sought for, as hyperæmia, ulcers, abnormal growths, folds, abscesses, and tumours, are often met with on or below the mucous membrane of the pharynx. These pathological conditions are still enveloped in much obscurity, and there can be no doubt that the rhinoscopic examination, both in the living patient and after death, will bring to light many important facts hitherto unknown. When the temporal bone has been separated, it is best, first to remove the anterior wall of the meatus auditorius by means of a pair of scissors and bone pincers, in order to arrive at the external surface of the membrana tympani. After this the tube ought to be examined, and the membranous part of its cartilaginous section removed by means of scissors. Having penetrated to the osseous part of the tube, it ought to be removed bit by bit, while at the same time the condition of the mucous membrane and the width of the canal is investigated. The nearer the cavity of the tympanum is approached, the slower and more careful ought to be the progress, regard being had to abnormal growths or folds, which may exist in the neighbourhood of the orificium tympanicum. As the caput mallei is situated immediately below the tegmen tympani, this ought to be opened from behind, from the mastoid process, from where a good survey of the position of the malleus may be had. We ought then to investigate, whether the joints of the malleus, incus, and stapes are moveable, or whether there are any adhesions and abnormal growths. These are best seen, if a section of the cavity of the tympanum is made by sawing through the anterior part of the pyramid. The cells of the mastoid process must then be laid open from behind and above; after which the lower surface of the petrous bone, with the sinus transversus, ought to be investigated. If the lamella between the osseous part of the tube and the carotic canal, and the septum between the latter and the hole for the bulbus of the jugular vein, are then severed, the preparation becomes, by a few more cuts with a pair of scissors through the mucous membrane of the cavity of the tympanum and the portio dura, divided in two parts. The *external* half of the preparation shows part of the mastoid cells, and the inner surface of the membrana tympani, the malleus, incus, and the anterior wall of the osseous part of the tube. If the incus is cautiously taken out of its connexion with the caput mallei, the chorda tympani is seen in its entire course through the cavity of the tympanum; as are also the insertion of the tensor tympani muscle, and the membrane itself. The *internal* half of the preparation consists chiefly of the pyramid, and shows the walls of the labyrinth, the fenestra rotunda, its canal and its membrane. It is easy to find out whether the stapes is moveable or abnormally fixed; if the latter is the case, its crura break off by slightly pulling it. In cases where the examination of the internal ear is most important, and the preparation is still somewhat fresh, it is best to examine this at the commencement; if it is old, however, it ought to be placed for some days in a solution of chromic acid, or of chromate of potash. The latter is preferable, not only because the instruments suffer very much by chromic acid, but also because otoliths, which consist of carbonate of lime, are dissolved even by a weak solution of chromic acid, so that we cannot be surprised at not finding any otoliths, if the preparation has before been placed in an acid liquid. The acoustic nerve becomes exposed to view by breaking open the internal meatus from above; in microscopic examinations the portio dura and other nerves ought to be included. If the canalis Fallopiæ is then examined from the cavity of the tympanum and the genu of the portio dura, the cochlea and the vestibulum may easily be opened; in the cochlea, suppuration and extravasation may be found, and the vestibulum also shows sometimes interesting structural changes. It is not necessary to chisel out the whole course of the semicircular canals, as recommended by Voltolini; this not only takes up a great deal of time, but is useless, as the membranous covering of the bones may be easily extracted from the vestibulum, and subjected to further examination. Finally, the condition of the fenestra ovalis, the membranous ring which surrounds the base of the stapes, and the membrana tympani secundaria, may be examined.

We regret being prevented by want of spaee from following Dr. Von Troeltsch further in his interesting and accurate anatomical descriptions, accompanied as they are throughout the book by valuable and original practical hints to the Surgeon ; and we only add that we wish the best success to this little work, which is very agreeably written, and ought to be in the hands of all those of our readers who take a special interest in Aural Surgery.

Operationslehre und Statistik der Resectionen. Von Dr. Oskar Heyfelder. Pp. 399. Wien : 1861.

(*The Operative Proceeding in and Statistics of Resections.* By Dr. Heyfelder.)

The Surgeon of St. Petersburg has, in this volume, brought together the whole of our present experience on resections, and has added to it a considerable number of observations of his own. The industry displayed by the author in collecting everything published on this subject in the literature of all countries, is most praiseworthy, and such as is only found in the works of German *savans*. Of the whole book we may truly say, that on going carefully over what Dr. Heyfelder has written, we find few points, theoretical as well as practical, in which the best-informed reader may not find himself amply repaid for his trouble. But as a criticism would be incomplete which did not contain an objection, we may express our regret, that in so comprehensive a treatise an index was omitted, which would have greatly enhanced the value of the book.

Dr. Heyfelder's work is divided into a general and a special part. In the former we find a chapter on resections generally, the instruments necessary for performing them, and the operative proceeding ; the second chapter treats on total and partial excision of bones, on the operations for exostoses, necrosis, abscess of bones and cancer, etc. ; the third on the excision of joints. The special part commences with the resections of the extremities. A physiological anatomy of the joint under consideration is given at the beginning of every chapter ; then follows the history of the resection of it, the indications for the operation, a description of the operative proceeding, statistical tables showing all the resections performed until now, and notes on the after-treatment. In the tables, which constitute a striking feature of the book, the name of the operator, the age and sex of the patient, the disease or accident for which the operation was done, the result of the operation as regards life or death, and eventually the use of the extremity, the causes of death, and general remarks on the cases are given. We thus learn that resection of the hip-joint has been performed in 71 cases, the first operator being Anthony White, in 1815, and the results being 33 deaths, 33 cures, and 5 unknown ; total resection of the knee-joint in 183 cases, the first operator being Filkin, of Northwich, in 1762, the results being 54 deaths, 125 eures, and 4 unknown ; partial resection of the knee-joint in 36 cases, the results being 16 deaths and 20 cures ; total resection of the foot-joint in 22 cases, amongst which are 3 deaths and 19 cures ; partial resection of the same in 77 cases (8 deaths and 69 cures ; resection of the astragalus in 67 cases (9 deaths and 58 cures), Fab. Hildanus being the first operator, in 1670 ; resections of the calcaneus in 84 cases (1 death and 83 cures), the first operator being Fornisus, in 1669, etc. Concerning the resections of the upper extremities we find amongst others 288 cases of resection of the elbow-joint (32 deaths, 220 cures, 6 doubtful, 17 partially suecessful, and 13 failures). Altogether 2662 resections have been made ; the results are known of 2241 cases ; there have been 452 deaths and 1616 complete eures ; in 1789 cases the life has been saved ; 173 cases have been unsuccessful ; and of 421 the result is not known.

With regard to the results of resections in Russia, the Author remarks that the climate of the country and the general constitution of the people are unfavourable to resections, and that the enthusiasm he formerly felt for these operations has been considerably cooled down by his experience in the Eastern Empire. Eight remarkably well-executed plates have been added to the book, showing the instruments to be used, machines for after-treatment, and preparations of diseased bones removed by resections. We strongly recommend this book for translation to the New Sydenham Society.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CONDITION OF THE LUNATIC ASYLUMS IN THE DEPARTMENT OF THE SEINE.

From the Report addressed by M. Girard de Cailleux to the Prefect of the Seine, we extract some facts and observations which may prove of interest to our readers. Until the year 1838 no other laws prevailed in France with respect to the insane than the measures of police required to protect the public against dangerous lunatics. Other insane persons were sometimes admitted into Hospitals, like other patients, and were sometimes refused admission. They were not infrequently confounded with malefactors, and cast into gaols, or they were allowed to wander about the public ways. By the law of June, 1858, the insane were acknowledged as fitting objects of public care, and asylums for their reception were erected in various parts of France. The number of the insane was in 1818 estimated at 8000 or 9000, and in 1834 M. Ferrus reckoned them at 8390 treated in hospices, and 3600 who were either wandering about or under the care of their friends, amounting, therefore, to about 12,000, costing the Government about 1,200,000 francs. The number of establishments for treating lunatics in 1818 was only 8, and in 1837 they amounted to 105, viz. 1 belonging to Government, 38 to the departments, 4 to hospices, and 45 to private persons. At present the number of insane in France amounts to 60,293, viz. 26,289 in establishments, under inspection, and 34,004 either not under treatment or with their friends. The expense to the country has risen to 7.000,000 francs. In the department of the Seine alone there are 4056 insane under treatment, at an expense of 1,593,329 francs. In the course of sixty years the number of the insane treated in the hospices of the Seine has quadrupled, and in nine years it has increased by more than a fourth. This increase is accounted for by the reporter in various ways :—1. The increase of the population of the department of the Seine from 1,194,603 in 1841 to 1,977,400 in 1860. 2. The small number of the insane who are reclaimed by their friends after they have been transferred from the asylums of the Seine to those of the provinces, and who are still chargeable to the department of the Seine. 3. The great facility of incarceration—every insane person, however inoffensive he may be, being considered in Paris as liable to become dangerous. 4. The inclusion of idiots and imbeciles. 5. The admission of persons into asylums (constituting a tenth of the whole of the inhabitants) whose minds are only weak, and who, not being lunatics, properly so-called, should be consigned to the hospiees. 6. A clashing of the authorities under whom administration of the insane is placed. 7. It may be inquired whether there has not also been a real proportionate increase of insane in modern times.

The Inspector next goes on to show what have been the consequences of the resolution taken in 1844, in spite of the protests of Medical authorities, to transfer the superabundant insane of the Seine to private or public country establishments, in place of providing new asylums for them in the department of the Seine. They have become thus the objects of individual speculation, their wants being very insufficiently attended to. A recent inspection of these establishments brings out these facts concerning the condition of the insane :—1. Great want of space, sometimes extending to great overcrowding, only 7 or 8 cubic metres of air being provided in the sleeping-rooms for each individual, in place of 24. The same may be said of the refectories, which are used also as day rooms, while the airing-yards are too limited, and often surrounded by high walls, which obstruct both vision and the access of air. 2. The grounds attached are too often very insufficient, rendering impossible the advantages to be derived from exercise and labour performed in the open air. The total superficies of some establishments is less than a hectare (2½ acres). 3. The classifications are almost everywhere incomplete. Epileptics are generally mixed up with those suffering from simple insanity, although this is contrary to law. 4. The violent insane are too numerous, moral discipline being insufficient. In almost all the Asylums they are mingled together, and with the more peaceable, thus

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fostering the agitation rather than assuaging it. In one Asylum only are there some separate rooms, with spacious gardens, looking on to the country. This should become general, in order to remove the delirious patient from the contact and vociferations of his fellow-sufferers, substituting for these, the calm and benevolent cares of an attendant. 5. The proportion of dirty patients is too great. Treatment suited to the condition of the nervous system, combined with moral and intellectual action, by modifying favourably the functions of the nervous system, may give rise to the diminution or removal of this unfortunate symptom. 6. Means of restraint are generally abused. As a principle, they should be abolished, and reserved for temporary and exceptional use 7. Grave errors exist in the mode of keeping the case-books. 8. In general there is much to be desired in the dress of the patients, even when this is not insufficient, torn, or dirty. In only one Asylum had each individual clothes appropriated to himself, which is a means of order and improvement that should be extended to all establishments. 9. In most Asylums the bed time is half-past six; and although the beds are generally good, in some instances this is far from being the case. Patients have been found in some Asylums lying on straw, and fastened down by cords in very constrained positions. 10. The diet varies in different Asylums; but as a general rule it errs by deficiency of animal and an exaggeration of vegetable matters. The consequence is the predominance of mortality due to abdominal affections. The Inspector points to some of the rascally results of speculation in the management of the insane, produced by substituting vegetable diet for bread and meat. 11. The surveillance is usually insufficient and incomplete. In only some of the private Asylums is there one *employé* for ten patients. 12. The employment of the insane is neither so extensive or so varied as it might and should be. The directors of the Asylums seek much rather to profit by the labours of those of the insane who willingly work, and who are often overtasked, than to apply this means of treatment to those whose perverted or enfeebled mental and corporeal faculties render them more difficult of management, and the results of their labour less lucrative. 13. In almost all the Asylums the means for intellectual and moral exercises are insufficient.

It is found that of the patients transferred from the department of the Seine to these provincial Asylums, not a twentieth part are submitted to Medical treatment. This proves how little is the interest, whether scientific or humanitarian, which they inspire. There is nothing, in fact, to stimulate the zeal of the Physician. Family and friends are absent, and there are no indications furnished as to the antecedents or prior treatment of the disease. The scientific interests and reputation of the Medical attendant who has not seen the case from the beginning are not engaged, and the withering belief placed in the unjust idea of incurability, paralyses all serious attempts, and too often leads to its being forgotten that these unfortunate patients are more liable than any others to incidental affections and to an impoverishment of the constitution. Of 3267 insane transferred from Paris to these Asylums, only 103, or 1 in 31·70, were cured, while the recoveries in the Asylums of the Seine amounted to 1 in 3·34 during the period 1844-58. The mortality in these Asylums, too, rises to a high proportion, being 1 in 2·30 during 1844-58, while during the same period it was but 1 in 3·17 at Bicêtre, and 1 in 3·68 at Salpetrière; and yet the insane sent to the provincial Asylums were the most valid, those being retained in the Paris Infirmaries who were most infirm and most seriously affected—thereby increasing beyond its natural degree the mortality of these establishments—this being prior to the transfer to the provinces, 1 in 4·15 for Bicêtre, and 1 in 4·25 for Salpetrière. As additional reasons for discontinuing this transference of the Paris insane, the Inspector points out the great pecuniary losses produced by the high sums paid for taking charge of them, out of which very great profits are made by the country Asylums. For these reasons, and in order to relieve the Bicêtre and Salpetrière of their insane populations, he recommends that accommodation for 4000 patients shall be provided in the provincial districts of the Department of the Seine, which he considers may be completely obtained at a mean expense of 2500 francs per patient—an expense, indeed, which will be met by economizing the present extravagant outlay.

[It will be seen from the above extracts, how far the provisions for the care of lunatics in France are behind our own. Steps are, however, as we have announced in a previous Number, about to be taken to erect six or seven Asylums for the Department of the Seine.]

EXCERPTA MINORA.

Treatment of Gleet.—Dr. Otterson, of Brooklyn, New York, recommends the following procedure as by far the best in the treatment of gleet. He first examines the patient to ascertain whether any stricture exists, and if this is the case the usual mode of relieving the stricture may cure the gleet. When this does not happen, or if no stricture is present, he introduces a grooved bougie (from No. 6 to 10, generally No. 8), the groove of which is filled with citrine ointment or calomel—the latter being more certain in its action. The instrument need only be passed in far enough to get the point beyond the glans, when it should be carefully revolved several times. It should be kept in for from three to five minutes, and then a probe, adapted to the curve of the instrument, is to be passed down the groove, so that, on their simultaneous withdrawal, the whole of the ointment or calomel may be left behind. This may be repeated twice or thrice a week, the bowels being kept open; and a very short time is required for the removal of even a hitherto intractable gleet. A very little smarting, and perhaps a little bleeding, may be caused at first. In spermatorrhœa and irritable urethra, besides this treatment, the various adjuvants, as tonics, bathing, friction, good ventilation, etc. must be resorted to.—*North American Medico-Chirurgical Review*, July, p. 667.

Knots in the Funis.—Dr. Read exhibited to the Boston Medical Society a funis upon which was a double knot, the two knots having been apparently tied one upon another. The cord was about thirty inches long, and was coiled once around the child's neck and arm at birth. Dr. Read maintained that these knots, like all knots of the cord, were tied by the child passing through a loop, or loops of the funis about the internal os. The knot under consideration was made by two loops separate from each other, and arranged about the os, through which the child's head passed in the delivery, and they were tightened when the cord was put to its tension after the delivery. Under ordinary circumstances, this peculiar arrangement of the loop would have formed two separate knots at the distance of a few inches from each other, but from some cause the passage of the one first formed was obstructed at the other loop, and they became tied upon each other. Dr. Read demonstrated on a cord the manner in which the knots must have been formed, and the ease with which, by one motion or manipulation of the string, the most complex knots could be imitated.—*Boston Journal*, June, p. 449.

Unguentum Hydrargyri Nitratis.—After numerous trials, Mr. Nichols states that the following is the best means of preparing this valuable ointment:—Pure mercury (free from tin or other impurities), 1 oz.; nitric acid (sp. gr. 1·40), 14 fluid drachms; best fresh butter and lard, of each 6 oz. Dissolve the mercury in the acid, under a draught, and stir with a glass rod until the nitrous fumes have escaped. Melt the butter and lard together, raise the temperature to 120°, and pour in the acid solution. Perfect reaction will take place in the course of a few hours, and the mass will puff up, evolving nitrous vapours freely. It should be stirred occasionally with a wooden or porcelain spatula. When cooled the result is a very perfect golden-coloured ointment of the right consistence, which will remain unchanged for many months. The butter and lard together make a much finer ointment than does either separately. If large quantities are prepared the temperature needs to be raised only to 100°.—*Boston Med. Journal*, June, p. 415.

Spontaneous Expulsion of a Large Calculus by a Girl.—A girl, 5 years and 8 months old, had suffered for two years from disorder of the urinary organs. At last the urine could only be discharged, amidst excessive pain, by the child passing in the finger and manipulating the stone which caused the obstruction. When Dr. Tschepke was called to her she was in the agonies of complete retention of urine, as a large calculus was in great part extruded. He extracted this with the thumb and finger, and an enormous quantity of urine followed. The calculus weighed 174 grains troy, and measured 1 inch 7 lines in its long, and 9 lines in its transverse diameter. It was hard in consistency, and was composed chiefly of

phosphate of lime, containing also phosphate of magnesia and urate of lime.—*Deutsche Klinik*, No. 3.

[We may refer to a case related by Dr. Bradford in the *North American Medical-Chirurgical Review* for July, p. 669, in which after repeated dilatation by means of bougies, he succeeded in extracting a stone through the urethra of a little girl, measuring one inch and three-quarters in circumference. He attributes his success in part to having used chloroform, not only during the operation, but during the numerous preliminary dilatations. Two years after the operation she continued perfectly well. The age of the child is not stated.]

Chlorate of Potash for Fetid Breath.—Many persons suffer from fetid breath, without this being attributable to the presence of bad teeth, or the want of attention to the mouth, the gums and mucous membrane being also quite healthy. The smell may proceed from the lungs or the stomach, but in nine cases out of ten it originates in the stomach, and the following is then a simple and prompt remedy:—Three hours after a meal take a large teaspoonful of a solution of six parts of chlorate of potash in 120 parts of sugared water, and at the same time rinse out the mouth well with the same solution.—*Bulletin de Thérapeut.*, Vol. lxi. p. 73.

Marriage of Epileptics.—M. Legrand du Saulle, on the occasion of being consulted on the subject by a Practitioner, himself in doubt, has prepared an interesting essay upon this subject, the general conclusion of which is, that an epileptic patient cannot marry without danger to himself and his descendants. He considers that epilepsy can be referred to a hereditary origin in about one in twelve of the cases which occur.—*Annales Medico-Psychologiques*, Vol. vii. p. 23.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

August 14.

In one of my former letters, when speaking of the excisions of joints, which had been practised in this town, I said that, as far as I was aware, there had been none of the hip-joint. I find, however, that there have been two such cases, one under the treatment of Mr. Hamilton, of the Southern Hospital, in which the patient, a boy, recovered well from the operation, but died of an attack of fever; the other, under Dr. Nottingham, also of the Southern Hospital, resulted in complete success. The case of amputation at the hip-joint, mentioned in my last communication, has, I am glad to say, progressed most favourably. The other case of fungus hæmatodes, to which I referred, proved fatal, the poor little girl died, more from pain than from any other cause, for although some days before death there was ulceration of some parts of the surface and commencement of hæmorrhage, this was readily arrested by the application to the bleeding surface of equal parts of powdered alum and tannin, and, I think that in this case, as in many others, the exhausting effect of simple pain has a more immediate connexion with the fatal result of cases, than is generally recognised.

Since my last letter the reports of the Officer of Health have shown some remarkable vicissitudes in the mortality of the borough.

During the week ending July 20, the deaths were 228 against a corrected average of 207 in the corresponding weeks of the previous ten years. Deaths from zymotic diseases 75 against an average of 62. Of these, 41 were from diarrhœa, and out of this number 38 were children. It is remarkable that this week these deaths from diarrhœa had run up from only 10 in the previous week to a total which exceeded by 13 the highest number of the summer of last year, such an increase never having been observed before. The mean temperature of the week was 61·9°, nearly 1½° below the average. Rain fell on six days of the week. The next week, ending July 27, the deaths rose from 228 to 266, being 40 more than the corrected average of the past ten years at the same period, and exceeding the number of deaths in any week since the extreme cold of last winter. Diarrhœa was accountable for 45 deaths (average 32), hooping-cough 21 (average 8). The mean temperature was 62·4, and rain fell every day during the week. Next week, ending August 3, the numbers showed another remarkable modification, the deaths descended to 225, this being 41 less than the preceding week, and 30 less than the corrected average. Zymotic diseases, 71, or 20 less than last week, and 27 under the average. Of this number, 35 were due to diarrhœa, this being 10 less than the average. The mean temperature was 62·2°, nearly 1½° below the average. I feel quite at a loss how to account for these most unusual variations, the sudden increase and equally sudden decrease not being referrible to any obvious atmospheric cause, while there has been nothing in the circumstances of the town to aid us in determining the reasons, either for the rise or the fall in the mortality. This is just one of those circumstances that indicate the necessity which exists for some method of detecting those delicate, chemical, or electrical changes in the air, of which we as yet know comparatively so little, but upon which so much life and health depend.

Among the memorabilia of this month, I think I ought to mention the inauguration of a very complete suite of baths by the "Oriental Bath Company of Liverpool." The building converted into baths was formerly a chapel, and has been altered from its former style of architecture with considerable skill and taste. There are three distinct baths, one for ladies, one for gentlemen, and a private bath. Each of these includes a frigidarium, tepidarium, and calidarium, and to the gentlemen's bath is added a laconicum in which the temperature can be raised for the convenience of those for whom a very high degree of heat may be required. It is intended that the temperature of the tepidarium shall be kept at from 105° to 110°, and that of the calidarium at from 125° to 135°. Arrangements are provided for the cold "rain douche" and "column douche" in the lavatoria which are annexed to the calidaria. On the occasion of the opening of the baths an inaugural lecture was delivered by Dr. Haughton, who has had considerable personal experience of the bath in the East, and who has been one of the principal promoters of the present scheme. The Mayor was unable to attend, but the Deputy-Mayor, Mr. S. Holme, was present, and in thanking Dr. Haughton for his lecture, assured the directors that if the statements then made as to the ancient Romans having had their digestive powers so invigorated by the bath as to be capable of digesting "two or three dinners a-day" were sustained by the experience of modern Britons, it was highly probable that the whole sixteen aldermen of Liverpool, headed by himself, might present themselves some fine day after the ingestion of one civic dinner to ascertain whether the use of the bath would really qualify them for a second or possibly a third of these exercises! Whether this experiment succeed or not, I think that the new bath cannot fail to be a valuable addition to the already-existing very excellent baths provided by the Corporation.

The cases at the Eye and Ear Infirmary, averaging as they do a hundred a-day, and frequently rising far above that number, bring under observation many classes of disease of great interest. Several operations for the relief of glaucoma, either by the division of the ciliary ligament or the removal of a portion of the iris, have been performed by Dr. Taylor, Dr. Nevins, and Mr. Bickerton. The former operation has been followed by great relief to the tension of the eye and the pain. The latter has also been attended by great amelioration in the pain and, in some cases, by an amendment in the vision; but in the greater number the sight has not been much improved.

To turn, now, to another department of Surgery, I may record a case which has just occurred, and is of interest as showing the strength which is acquired by the cicatrix formed in Mr. Baker Brown's operation for the restoration of the perineum.

A strong, healthy woman, aged about 21, suffered a laceration of the perineum in her first labour, which occurred about three years since. The laceration stopped just short of the sphincter ani; the patient recovered well and returned to her work as a domestic servant, but she shortly found herself disabled for hard work, in consequence of the prolapse of the bladder which soon commenced. She was admitted into the Workhouse Hospital under the care of Mr. Fletcher, and the operation was performed on the 7th of February, 1861. Iron wire was used for all the sutures both superficial and deep. The wound healed completely through its whole

extent, a great part by the first intention, and the patient recovered without any symptoms requiring special notice. Some suspicion was entertained at the time of the operation that the patient was pregnant, as two menstrual periods had been missed, but she strenuously denied the possibility of such a thing. On the 8th inst. she was delivered in the lying-in ward of the Workhouse. The presentation was a natural one, and as soon as the head came near the outlet, it became evident that its size was quite up to, if not beyond, the average. As soon as the head began to press upon the perineum, firm and careful support was afforded to it by the pressure of the hand covered with a soft napkin; a good deal of oil was rubbed into the perineum in the intervals of the pains, and oil was plentifully injected into the vagina to soften the parts and facilitate as much as possible the passage of the head. The perineum being a long one, the vaginal orifice was somewhat narrow, and as the head advanced, the pressure on the central point of the perineum became so great that considerable fear was felt that a central laceration might occur. The counterpressure on the parts, during each pain, directing the head forwards under the arch of the pubes, was steadily kept up, and the surface gradually yielded almost exactly as in a first labour, excepting that in consequence of the length of the perineum it adapted itself to the head almost like a cap, and was elongated antero-posteriorly as well as stretched laterally. The forehead passed through the orifice nearly as far as the eyebrows without the slightest rent. The pain that came next drove the remainder of the head through, causing a slight rent at the fourchette, but leaving the bulk of the new perineum perfectly sound. The trial which the parts in this case underwent was a severe one, as the child was large—the head being fourteen inches in circumference around the eyebrows and occiput. At the time the perineum was most distended, it measured three inches and a-half from the margin of the anus to the edge of the fourchette. Immediately after delivery, a single silver suture was inserted a little distance from the fourchette.

In two cases of the same operation recently performed by Dr. Grimsdale, iron wire was used for the sutures throughout. Both of these cases have done well. At all the Hospitals here, I believe that wire sutures have replaced the silk or thread ones, but I have only seen wire used for the purpose of ligaturing vessels once, and that was some months since in an amputation just below the knee. In this case their non-irritating quality was tested by the fact of an obstinate little vessel in the substance of the posterior tibial nerve persisting in bleeding in a manner that made it undesirable to leave it. This was tied with fine silver wire, and the only inconvenience noticed in connexion with the use of these metallic ligatures was that they took considerably longer in coming away, than the others usually do. Dr. Simpson's plan of acupressure has been tried at the Infirmary; but without very encouraging results: the vessels certainly have been well controlled, but there does not seem to have been anything gained as regards the union of the wound, in the cases in which it has hitherto been tried.

A fatal case of poisoning by oxalic acid came under the notice of the Coroner a few days since. The quantity swallowed could not be accurately ascertained, as the woman had emptied a large quantity into a glass, and drank apparently as much as she could, leaving still a good deal undissolved. She lived three hours. A post mortem was made by Dr. Ayrton, and the principal appearances were intense congestion of the stomach and duodenum, with the effusion of a large quantity of dark blood into these viscera.

Just a few words, in conclusion, on a subject which seems to be exciting a good deal of interest just now, I mean that of Homœopathic Consultations, respecting which I believe that the opinion of the great body of the Profession here is very decided, although very different grounds are taken by different gentlemen for the same decision—that they will not be associated with Homœopathic Practitioners in any Medical or Surgical case. Some say, "We regard these gentlemen as having forfeited their professional status when they took Hahnemann for their Prophet, and *similia similibus*, etc. for their creed. We cannot believe them honest unless we ascribe to them an amount of credulity so vast, and an amount of reasoning power so infinitesimally small, that even their history of a case we should deem worthless; and, therefore, we will have nothing to do with them." Others say, "These men do not all of them seem fools, nor does the private character of some of them render it possible for us to think them knaves; but, seeing that we believe their fundamental principle to be the climax of absurdity, we can no more be honourably associated with them in attendance than could those who are diametrically opposed in politics be allied honestly in the same Government." Others, lastly, and these are I believe a small minority, say—nothing. Perhaps that is their wisest course. They meet the Homœopaths, pocket fees not infinitesimally administered, and experience doubtless how true it is that "the jingling of the guinea helps the hurt that honour feels."

P.S.—August 20.—I am happy to say that Dr. Duncan's last Report shows that in the week ending August 10, the total deaths in the Borough were 17 below the average, those from Zymotic diseases 8 less than the usual; but hooping-cough caused 18 deaths, or 10 above the average.

IRELAND.

Dublin, August 21.

The Fifth Annual Meeting of the National Association for the Promotion of Social Science was opened in this city on Wednesday, the 14th instant, with an eloquent address by the President, the Right Honourable Lord Brougham. To those who are curious in noting coincidences, it may be interesting to observe in passing, that the fifth meeting of the British Association for the Advancement of Science was also held in the capital of Ireland, "renowned," as the noble President said, "for having given to the world men illustrious in all the departments of science and of art, as well as of arms. But," added Lord Brougham, "it is to me individually a painful reflection that the most eminent of these, and whose friendship was my comfort and my honour, I cannot meet in this my first visit to the country adorned by their transcendent genius—Grattan, Plunket, Wellington, Wellesley—the great patriot, the consummate orator, the first of warriors, foremost, too, among statesmen, and the illustrious head of his house, the greatest of all who ever ruled over Ireland; all of these I have been doomed to outlive, and to the dispensations of Providence it is fit we should be resigned. But the loss of such men to their country is grievous, and more especially of one whom I have named. The others had accomplished the high work to which they were severally called, and left their bright example to guide us, and their success to cheer; but of the great Duke, whether in peace or in war, whether we look abroad or at home, while we cherish the immortal memory, we feel the loss not to be repaired." Interesting, however, as was the two hours' address, in which the noble Lord sketched the progress of social science during the last year, and described its present state and prospects, it is my duty now to pass from its more general topics, and to endeavour to place before your readers a brief abstract of the proceedings of the Department of Public Health, presided over by Lord Talbot de Malahide.

In this Section Dr. Moore read a paper on "The More Prominent Causes of an Excessive Mortality in Early Life." This excessive mortality he showed to be due to, first, defective vitality at birth, transmitted from either or both parents. Secondly, to the mismanagement by parents or nurses with regard to food, dress, cleanliness, etc. Thirdly, to the deficiency of light, air, and ventilation, to which might be added an ignorance of physiological principles, and of the pathology and therapeutics of many of the diseases incidental to early life. Under this latter head, Dr. Moore alluded to the neglect or disregard of the protective influence of vaccination, and referred to the Report of the Commissioners of Poor-law to show that the number of children, among the annual births in Ireland, who ought to be presented for gratuitous vaccination, is about 145,000, but that of the persons vaccinated less than a fourth are under one year old, the remainder being frequently between one and ten years of age, not uncommonly between ten and twenty, and some even older than this. Hence, of the 106,000 persons vaccinated last year, not 30,000 belonged to the 145,000 births among the poor for the year; and above 100,000 of the children had not received protection from vaccination on September 30 last. The absence of a bill for the registration of births and deaths in this kingdom, and the fact of the recent Census returns not being as yet available, leave us in darkness as to the exact returns of the mortality from this source, both annual and

decennial. Having referred to the diminution of 787,842 souls in this kingdom, during the last decade, as compared with the former, Dr. Moore showed how imperative it is to preserve in every way the infant frame; the bane of an excessive infantile mortality not being confined to the present generation; for, where such an evil does exist, a large proportion with difficulty attain a stunted puberty, in their turn to become the parents of a progeny more deteriorated mentally and physically, and thus sapping the very foundations of society. His paper, which abounded in important and interesting detail, gave rise to a discussion in which Mr. David Smith, of Glasgow; Dr. Lankester, of London; Dr. Fitzpatrick, Dr. Mackesy, of Waterford; Dr. Lyons, and the President, took part.

Dr. Alexander Harkin next read a paper, in which he dwelt upon the urgent necessity for a systematic registration of "Births, Deaths, and Diseases," and contended that the scientific compilation and superintendence of vital and mortuary statistics should both be intrusted to Medical men, whose special training, education, and habits of thought familiarise them with the phenomena attendant on the events of birth and death.

Lord Talbot de Malahide said he was sure every one in Ireland regretted that they had not a registration of births and deaths; but he hoped that cause of complaint would soon be removed. There were practical difficulties as regarded the registration of marriages, but these also, he thought, would be overcome.

Dr. Lankester said the registration should be intrusted to Medical men.

Lord Talbot de Malahide said he wished to make an observation as to deaths occurring in Scotland, where violence might have been resorted to, and yet no inquiry was made.

Dr. W. B. M'Kinlay, of Paisley, said that inquiries were made in Scotland privately as to sudden deaths, by a Doctor and the Procurator-Fiscal; and the Procurator-General, if he thought it necessary, made a full investigation. Cases were thus fully investigated, although the facts might not be made known.

Dr. Lankester read a paper by John Beddoe, M.D., on "The Physical Degeneration of Town Populations."

Dr. Lyons read a paper, written by Miss Florence Nightingale, on "Hospital Statistics." In this paper Miss Nightingale recommended that sites which should be chosen for Hospitals should be those enjoying a sheltered position, that the buildings should not be erected too high, but that each apartment should be high, airy, and spacious, and on no account be overcrowded. She strongly advocated the necessity of having well trained nurses,—those who had been regularly educated in Hospitals,—to take charge of the sick.

After some conversation, in which the admirable suggestions of Miss Nightingale were warmly commended, the Section adjourned.

In the evening the Members and Associates were present at a *conversazione* given by the Royal Dublin Society, on which occasion not only the extensive suite of apartments in the Society's House, but also the beautiful and successful Fine Arts Exhibition at present being held in the Agricultural Museum, were brilliantly lighted and thrown open.

On Friday the Department met at eleven o'clock.

Dr. Mackesy, of Waterford, read an important paper "On Dipsomania in its Relations to Medico-Legal Arrangements." Having alluded to a well-written paper read before the Association at its meeting last year in Glasgow, by Dr. Peddie, as well as to the instructive and valuable lecture of Dr. Christison upon the same subject, Dr. Mackesy suggested the adoption of the following regulations:—1. That reformatory establishments for the reception of dipsomaniacs, under the management of registered Physicians or Surgeons of a certain number of years' standing, should be opened, registered, and inspected by the Inspectors of Lunatic Asylums, and that the managers of these Institutions should be empowered to use such restraint as might be required. 2. That such establishments, being intended, in the first instance, for persons in better circumstances, should be self-supporting. 3. That a code of regulations should be drawn up, setting forth the rules and regulations and the amount of restraint to be enforced; the manager to keep a journal, in which all cases of restraint shall be fully entered, with the cause. 4. That a dipsomaniac should not be admissible into such an establishment without a Medical certificate, signed by two Medical men; and, if a voluntary patient should make a declaration before a magistrate, giving the facts of his case, and stating that he places himself voluntarily under control, it should be the duty of the magistrate, before whom such declaration is made, to inquire into and ascertain the correctness of such statements, and to report to the next petty sessions. 5. When a dipsomaniac shall be sent, without his consent, to such an establishment, in addition to the Medical certificate there must be a declaration from a near relative, giving a full history of the case, which, with all other information, must be submitted to the magistrates at petty sessions of the district, who may inquire privately, and may commit the patient to a reformatory for dipsomaniacs, provided two-thirds of the magistrates assembled concur in granting such order. In all cases of insanity or dipsomania there should be an appeal to the assistant-barrister at quarter sessions.

Dr. Henry Kennedy read a paper entitled, "The Influence of the Food on the Intellect." After disavowing all idea of materialism, he spoke of the close connexion of mind and body, and the reciprocal action of each on the other. In health this was not so observable; but if slight indisposition —to say nothing of more serious disease or pain—occurred, then everyone was conscious that the natural powers became impaired. Education proved what an immense power we possess over the mind; and the object of the writer was to show that, by a proper modification of the food, we could not, indeed, create, but we could improve that noblest part of our being. In pursuance of the argument, he spoke of the results of feeding on the lower animals, and of culture on vegetable life. In conclusion, he observed that for obtaining the highest powers of mind, it is essential that food should be used in moderate quantity.

Mr. Lees condemned the use of spirituous liquors which, he maintained, poisoned the animal system.

Mr. James Haughton argued that the strongest races were those who eat vegetables, and instanced the athletes of the Himalayas, who, he said, were the strongest men in India. The Irish also were strong men, and they very seldom eat flesh.

Surgeon-Major Burke had resided for many years in India, and from his observation he considered the Mussulmans, who eat flesh, a superior, much stronger, and more courageous race than the Hindoos, who subsist chiefly on vegetables.

Dr. Lankester said, unquestionably the strongest races were those who eat flesh. He did not think Mr. Haughton was quite correct in saying the Irish did not eat animal food, for since he came to Dublin he had seen a good deal of beef consumed. (Laughter.) As to drinking alcohol moderately, he said he had never seen any deleterious effects to the human system occasioned by it.

Lord Talbot de Malahide: If the Irish are a strong race, it cannot be denied that they are fond of alcohol. (Laughter.)

Dr. Milroy read a paper, written by J. O. M'William, M.D., F.R.S., on "The Health of Merchant Seamen." Merchant seamen were not so much exposed to the climatorial sources of disease, more especially those of the tropics, as the men in the service of the navy. They were exempt from the diseases and casualties incident to war, and yet the records, so far as they go (perfect as regards deaths at sea, but far short of the actual number due to sea service), indicate a mortality from all causes at least equal to that of the Royal Navy. The conclusion, therefore, appeared inevitable that "all is not done that might be done" to secure the health and safety of the seamen of our mercantile marine. If the provisions of a bill prepared by the Right Hon. Edward Cardwell were carried out in their integrity, they would leave little to be desired as regards the health, comfort, and general well-being of merchant seamen while on board ship.

Dr. Fitzpatrick read a paper on "The Social and Sanitary Condition of the Labouring Classes in Ireland."

On Saturday the Section was occupied with a paper, by Mr. Fison, on "Practical Sanitary Work in Town and Country," which gave rise to considerable discussion. On this day the several Departments closed at one o'clock for a half-holiday. Many of the Members and Associates adjourned to the Examination-hall of Trinity College, to witness the conferring by the University of Dublin of the honorary degree of Doctor of Laws upon Lord Brougham, Sir John Shaw Lefevre, Sir James Emerson Tennent, and M. Michel Chevalier. M. Chevalier being a foreigner, and, therefore, unable to take the oath of allegiance to Her Majesty, an indispensable element in taking a degree, was presented instead

with an equivalent diploma and letters testimonial. In the evening His Excelleney the Lord-Lieutenant, Lord Brougham, the Council of the Association, and many of the resident and non-resident members and associates were received by the Very Rev. Dean Graves, President of the Royal Irish Academy, at a brilliant *conversazione* in the Academy House. "The President of the Academy may be congratulated," observes a local newspaper, "upon the perfect success of this experiment of inviting ladies and gentlemen to an intellectual and social *conversazione* within the walls of the Academy."

The business of the Department of Public Health was commenced on Monday by Dr. Denis Phelan, who read a paper entitled, "The Necessity of an Act for making Vaccination Compulsory in Ireland, with a view to get rid of Small-pox altogether, or, at least, to lessen the number of persons affected by it." Dr. Phelan states that, though all persons, rich and poor, have been offered vaccination gratis since 1840, at least 65,000 persons have died of small-pox in Ireland within the last twenty years. But, in addition to this mortality, numerous persons who have had small-pox become blind, or suffer from serious diseases that are excited by it, as scrofulous swellings, consumption, etc. This mortality, and these diseases, could be altogether prevented or very much lessened were vaccination made compulsory, as it is in almost every civilised community, except Ireland. It has been compulsory in Great Britain since 1853, and, with a great reduction of small-pox, though the Act is somewhat defective; but this defect has been remedied this Session, so as to answer the utmost results that can be obtained. Whilst this beneficent legislation is being applied to England and Scotland, each successive Government has neglected to have similar measures passed for Ireland; no measure providing for the registration of births and deaths in this country having been enacted, and, consequently, small-pox is allowed to commit its usual ravages; as without such Registration Acts vaccination cannot be made compulsory. Dr. Phelan also points out the defective arrangements for vaccination in Ireland compared with those in England. In the latter, £2000 is annually voted by Parliament to enable the London National Vaccine Establishment to supply vaccine lymph gratis to all who apply for it; whilst in Ireland, up to 1858, only £200 were annually granted—now made £400; but every applicant for vaccine lymph in Ireland must pay for it, whilst in Great Britain it is given free. Every workhouse, dispensary, etc., and every Medical man has to pay in Ireland, and vaccination is thereby much limited. Dr. Phelan suggests that arrangements similar to those in England, and to others that are there recommended, be adopted here. In London there are sixteen vaccination districts, with paid vaccinators, who supply lymph to the parent institution; and the presidents of the latter advise that a branch of it be established in the different large towns in England in which there are Medical Schools. In like manner, Dr. Phelan suggests that in Cork, Belfast, and Galway, in each of which towns there is a Medical School, there should be a braneh of the Dublin Vaccination Institutions, as these large populations would supply as much lymph as would secure a sufficiency at all times, and the machinery for vaccination would thus be much enlarged. In England the Privy Counеil have lately recommended that no public vaccinator be appointed who has not the certificate of some competent authority that he has had sufficient opportunities of becoming practically acquainted with the practice of vaccination. The same is recommended for Ireland. These facts and suggestions surely deserved the serious consideration of Government and of the community at large, and Dr. Phelan had no doubt that the noble President of the Section of Public Health would use every effort to give effect to them in his place in Parliament.

Lord Talbot de Malahide said he would give the subject his most earnest attention, with a view to having Legislative enactment upon it. If nobody else took up the subject, he would introduce the matter to the House of Lords. (Hear, hear.) At the same time he would observe, that it would have a better effect if it were brought forward in the House of Commons. He mentioned this in order to enlist the assistance of gentlemen of the Association who had seats in the Commons.

On the motion of Sir Charles Hastings, a resolution was passed, calling the attention of the Council of the Association to the paper of Dr. Phelan.

Mr. Nugent Robinson read an essay on "The Dwellings of the Poor in Dublin," which elicited a long discussion; after which Dr. Lankester read a paper by Miss Corlett on "The Turkish Bath as a Curative Agent in Scrofula and Insanity."

In the evening his Excellency the Lord Lieutenant entertained at a grand banquet Lord Brougham and a large number of the leading members and associates at present in Dublin. About 106 sat down to dinner. At half-past nine the entire suite of the State apartments was thrown open for a reception, at which about 1800 ladies and gentlemen were presented.

On Tuesday Lord Talbot de Malahide, President of the Department, delivered the address on Public Health. Lord Brougham occupied the chair. Among the important subjects treated of by the noble speaker in his very able and eloquent address, were the necessity of checking, by Legislative enactment, the indiscriminate sale of poisons, and of having an educated and responsible class of druggists; the question of quarantine, on which his lordship spoke from personal experience; the advantages of the temperate use of wine; the question of Special Hospitals, of compulsory vaccination, and of the construction of Hospitals. "I cannot conclude," said his lordship, "without adverting to the great loss we have sustained by the death of the late Lord Herbert of Lea, who was for many years one of the brightest ornaments of the House of Commons, and would, doubtless, have added lustre to the august assembly which he joined, alas! so short a time before his decease. He fell a victim to his unceasing labour for the good of the Empire—an accomplished orator, and indefatigable man of business, and utterly devoid of any political rancour. To him we owe the valuable report on the sanitary state of the army which has led to so searching an inquiry, and to the great improvements which are in progress. He was, in the true sense of the word, a 'Social Reformer,' and, free from the influence of party strife, most energetically promoted the improvement of his tenantry, and supported every movement which tends to raise the character of man, not by dragging down the upper classes to the level of the lower, but by raising all physically and morally as religious and intellectual beings. Peace to his ashes! and few of us can look forward to a more enviable retirement from this brief and turbulent scene."

After some remarks by the President upon Lord Talbot's address, the Section adjourned to the Court of Queen's Bench, where Dr. Milroy read a report on "Quarantine." It contained the general conclusions and the recommendations of the elaborate report prepared by the Committee appointed at Liverpool three years ago. This report had been ordered by the House of Commons to be printed. Important modifications are suggested in the present system, which is universally acknowledged to have failed in its proposed object of protecting the public health against the importation of dangerous diseases from abroad, while it occasions many vexatious restrictions and obstructions to commerce and free international intercourse. The defective sanitary state of ports and of merchant shipping, and also of the crews, among whom there is much more sickness and mortality than is generally supposed, are pointed out in the report.

Dr. Lyons, after some observations, moved a resolution to the effect that the existing state of quarantine legislation and practice is liable to many grave objections, and often causes unnecessary impediments to international and commercial intercourse, without affording any adequate protection to the public health, and that it deserves the attention of Government, and calls for further investigation.

The resolution was seconded by Sir Charles Hastings, and adopted.

Dr. Lyons moved, and Dr. Lankester seconded, a resolution as follows:—"That it is highly desirable that an accurate report of all proceedings taken in respect of Quarantine in the ports of the United Kingdom, and also of all official communications received by the Government relating to quarantine in foreign and colonial ports, shall be annually submitted to the Legislature."

Dr. Lankester moved:—"That this section, in considering the various questions connected with the public health of Ireland, feel that no satisfactory information can be obtained on the subject of the prevalence of death and disease. Great difficulties must be experienced in attempts to diminish them in the absence of a national system of registration, and we recommend to the Council of the Association the considera-

tion of the best way in which the Association can assist in obtaining an Act for the Registration of Births and Deaths in Ireland."

Sir Charles Hastings seconded the resolution, which was unanimously adopted.

Dr. Lankester read a paper written by Mr. Edwin Chadwick, entitled "On the Application of Sanitary Science to Public Works of Irrigation, &c."

Mr. Parke Neville, City Engineer, read a paper "On the Sewerage of Dublin."

Mr. R. Griffin read a paper on "Poor Law Medical Relief."

In the evening a *conversazione* was given to the Association, by the Dublin Statistical Society, in the Museum of Irish Industry.

ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS.

On the 15th instant the stated annual meeting of the Association of Medical Officers of Asylums and Hospitals for the Insane in Great Britain and Ireland was held in Reynolds' Hotel, Sackville-street, Dublin.

Amongst the members of this important Association who were present we observed the following :—

Dr. Lalor, Physician-Superintendent of the Richmond Asylum, and President of the Association; Dr. Bucknill, Physician-Superintendent of the Devon County Asylum, the retiring President; Dr. Power, Cork District Asylum; Dr. R. Stewart, District Asylum, Belfast; Dr. M'Cullough, Medical Superintendent of the County Asylum, Abergavenny; Dr. Gilchrist, Medical Superintendent of the Crichton Institution, Dumfries; Dr. Burton, Medical Superintendent of the Maryborough District Asylum; Dr. Delany, Medical Superintendent of the Kilkenny District Asylum; Dr. Sankey, Oxford Asylum; Dr. Corbet, Dundrum Central Asylum; Dr. Flynn, Clonmel District Asylum; Dr. Boisragen, Birmingham; Dr. MacMunn, Sligo District Asylum; Dr. Wing, Northampton Asylum; Dr. Thurnam, County Asylum, Wilts.

Dr. Bucknill, the retiring President, having taken the chair, and Dr. R. Stewart, Belfast, having been requested to act as Secretary to the meeting, in the absence of Dr. Robertson, the General Secretary, the Chairman thanked the meeting for the honourable position he had held as their President, and the valuable support he had received from the Association during his year of office now expired. Having recapitulated the proceedings generally of the Society since their last meeting in London, in July, 1860, he referred pointedly to the renewed efforts at legislation as affecting their important specialty during the last Session, which, however, had proved entirely abortive, and called attention to the several questions still remaining unsettled in connexion with public and private asylums. He specially complained of the more than unjust position in which Medical Superintendents were placed regarding superannuation pensions, which they ought to have a claim upon as a matter of right after a certain term of years of service, and not be depending, as at present, on the caprice and whim of changing Committees—(hear, hear)—for services, too, so arduous and anxious, that no pecuniary reward, either in salary or pension, could suitably compensate. (Hear, hear.) Dr. Bucknill concluded a very interesting *resumé* by resigning the chair to his successor, Dr. Joseph Lalor, who, he felt confident, would fulfil the duties of his distinguished and important office to the satisfaction of all parties. (Hear, hear.)

Dr. Lalor, having now taken the Chair as President, proceeded to read his Address, which was a very elaborate and able paper bearing upon the best interests of the Insane, and pointing out various ways in which their treatment might be advanced: one being the necessity of a more highly qualified and better remunerated class of attendants; another, the absolute necessity of the status of the Resident Physician being acknowledged and maintained by the authorities; and further, the true wisdom and justice of the State taking upon itself the sole charge of the support of the insane poor—the causes of insanity being oftener of a general than of a local nature; concluding his eloquent address by holding out the right hand of fellowship to his *confrères* generally, whose interests were one and inseparable. (Hear, hear.)

Dr. Bucknill said that all present must be of one mind as to the excellence and appropriateness of the Address just delivered by their President, and moved, accordingly, that the best thanks of the meeting be given to Dr. Lalor, which was carried by acclamation.

Letters of apology, expressive of much regret at being unable to attend the meeting, were now read.

The next business transacted was the appointment of the place of meeting for 1862, which was fixed upon to take place in London during the month of July.

The appointment of President Elect for 1862 was next taken up, when Dr. Kirkman, the Physician Superintendent of the Suffolk County Asylum, and the Senior Superintendent of all the public asylums, was unanimously, and amid general applause, elected.

The Auditors' Report was read by Dr. Flynn, according to which the fiscal affairs of the Association were in a most flourishing condition, and abundance of the "sinews of war" was stated to be at command for the general purposes of the Association. (Hear, hear.) Wm. Ley, Esq., Oxford Asylum, was elected Treasurer; Dr. Robertson, Sussex Asylum, General Secretary; and Dr. Robert Stewart, Belfast Asylum, Secretary for Ireland; to all of whom the best thanks of the Association were now given, for their able and indefatigable services in promoting its best interests.

Dr. Mackintosh having resigned the Secretaryship for Scotland, Dr. Rorie, of the Royal Dundee Asylum, was appointed in succession to him to that office.

After the transaction of some further routine business,

Dr. Flynn rose, and read a resolution which had been placed in his hands, to the effect that the Medical and moral treatment of the insane in public asylums, including the direction of their classification, industrial occupation, and amusements, could, in the opinion of the Association, only be efficiently carried out under the superintendence of the Resident Medical Officer, solely responsible for the Medical and moral treatment of the patients to the proper authorities; and that the Association, accordingly, begged respectfully and earnestly to recommend that any alteration of the Privy Council rules for the government of Irish district asylums should be made in full recognition of this principle; and, further, that the Association desired to express their hope that, in the revised Government rules, the duties of the existing Visiting Physicians should be those of consulting and advising with the Resident Physicians, their salaries being continued as at present. Dr. Flynn, in advocating the necessity of the adoption of the foregoing resolution, observed that, so far as he himself was individually concerned, he had nothing to complain of the gentleman who filled the office of Visiting Physician in his institution, being a most satisfactory colleague in every respect;—(hear, hear)—but as, in point of fact, the existing rules of the Privy Council placed the Resident Physician in a most anomalous position, and, as a new Visiting Physician in the asylum with which he was officially connected might prove to be a very different and, perchance, a very litigious person, and measure every inch of ground with him—(hear, hear)—it was a matter of vital importance, on every account, that the existing state of things should no longer remain as they were, but be rectified by the proper authorities with the least possible delay. (Hear, hear.)

Dr. H. H. Stewart, Lucan Government Asylum, shortly, and with much effect, seconded the resolution.

Dr. Gilchrist, Crichton Asylum, stated that to his establishment there was an extra Physician attached, and paid a regular salary, whose duties simply were to attend when requested in any special cases, but that ordinarily his visits to the establishment were exceedingly few, months elapsing without his presence being required. (Hear.) He further mentioned that both in the Perth and the Dundee Asylums the office of Visiting Physician had ceased and determined with the best results in every respect to those Institutions. (Hear, hear.)

Dr. Boisragen, Birmingham, having asked for some information for his own satisfaction respecting the peculiarly circumstanced condition of the conductor of the District Asylums in Ireland,

Dr. Flynn stated that, in point of fact, as regarded the office of "manager"—the obsolete term for the superior intern officer—the Lord Lieutenant could appoint any one whom he pleased. (Hear.) He, however, and all the existing "Resident Physicians," had received their appointment as

such by the warrant of the Lord Lieutenant; but still the rules, as at present existing, made it quite a matter of sufferance, and not of right, the resident officer being in a professional character. (Hear, hear.)

Dr. Boisragen said that this was a state of things entirely unknown in England, and surprised him greatly.

Dr. R. Stewart, Belfast, wished to observe that the Resident Physicians had no feeling of hostility whatever to the Visiting Physicians, but the very contrary. (Hear, hear.) The Resident Physicians desired to have them still as colleagues, but in the character of consultants, which in point of fact they were, and by no means to interfere with their "vested interests," pecuniarily, as had been endeavoured to be propagated by certain parties. (Hear.)

Dr. Thurnam said that nothing could be fairer than the statement now made by the last speaker (Dr. Stewart), and that the Visiting Physicians certainly had no just grounds for thinking that there was any hostility towards them on the part of the Resident Physicians. (Hear, hear.) He would take that opportunity of stating that in England the Medical Superintendents of the public asylums had the advantage of one or more Resident Medical Assistants, fully qualified, and that in the event of a more than ordinarily difficult or serious case arising, they (the Medical Superintendents) were fully empowered to call in the assistance of any Physician of eminence they pleased to consult with, and to fee him for his visit. (Hear.)

Dr. Bucknill stated that, for his part, he could not well understand how the Irish asylums were conducted as at present constituted. (Hear, hear.) The English asylums had the substantial benefit, as mentioned by Dr. Thurnam, of Resident Medical Assistants, who stand in the same relation to the superintendent as the adjutant of the regiment did to the colonel. (Hear, hear.) Having the great benefit of these valuable and indispensable aids, all the advantages of a consultation as to the conduct of cases both medically and morally, were at constant command. (Hear.) The superintendent had such various duties to discharge that he could not constantly be in the wards of his asylum; he, besides had often unpleasant orders to issue, which it would not answer, or, in fact, be possible for him to see carried into effect; but all he had to do was to tell his assistant, who was held responsible for those orders being fulfilled. (Hear.) Every morning, too, his assistant made a report to him of the state of the house and the patients during the preceding night, and thus an immediate oversight was constantly kept in operation, which had the most beneficial effect in every point of view. (Hear.)

Dr. Duffy, Finglas, could not let the present opportunity pass without expressing his extreme surprise at the report made by a Royal Commissioner, that the experienced and highly qualified Physicians of the district asylums of Ireland were incompetent to treat their patients medically. (Hear, hear.) A more gratuitously insulting or extravagant statement than this could not have been made,—one for which there was no foundation whatever but in the mind of that Royal Commissioner himself. (Hear, hear.) The Resident Physicians, as a body, being confessedly a thoroughly well-informed and superior class of men. (Hear, hear.)

After some further discussion the motion was put from the chair and carried by acclamation.

A committee was then appointed, invested with full power to carry out the objects of the above resolution in such manner as they might deem best, whether by deputation to the Government or otherwise, and to report to next meeting. A standing committee was also appointed to watch any legislative measures that may be proposed during the ensuing session of Parliament in relation to lunacy. A special committee was also appointed to visit the colony at Gheel, for idiots and lunatics, and to make particular inquiry into its management, in order to be able to report on the same to the meeting in London, in 1862.

Dr. Bucknill, on the motion of Dr. Power, and seconded by Dr. Burton, was requested to continue his services as Editor of the Journal of the Association, and to accept their heartfelt thanks for the able manner in which he had always performed his editorial duties.

A marked and cordial vote of thanks was passed unanimously to Dr. Neligan, the Editor of the *Dublin Quarterly Journal of Medical Science*, for the invaluable annual reviews he had regularly given in its pages, for a series of years past, on "Insanity and Hospitals for the Insane." The President, in proposing this resolution, said he did so with heartfelt pleasure, and this the more especially as he knew that the very independent views propounded in the papers published in the *Dublin Quarterly Journal*, on "Insanity," were not given without offence to certain parties, who had endeavoured to turn the excellent editor from the independent and disinterested course he had pursued, but entirely without effect as they all could bear witness to. (Hear.)

Dr. Flynn, after stating his hearty concurrence in the vote of thanks adopted to Dr. Neligan, said he felt it his bounden duty to mention on that occasion, and before so influential a meeting as the present, that the conductors of the *Medical Times and Gazette* had always been the true friends and advocates of the rights and independence of the Resident Physicians, and had invariably given the benefit of their columns and influence in furtherance of the same. (Hear, hear.)

Several gentlemen were unanimously elected ordinary and honorary members of the Association.

Some further business having been transacted, Dr. Bucknill was called to the second chair, when the thanks of the meeting were given to the President for his dignified conduct in the chair, and the able and satisfactory manner in which he had fulfilled the duties devolving upon him.

The Association dined together, as usual, on occasion of their annual meeting, in Reynolds' Hotel. The chair was occupied by Dr. Lalor, and the vice-chair by Dr. Bucknill.

AUSTRIA.

Vienna, August 7.

ON ORTHOPÆDIC ESTABLISHMENTS.

The interesting communications of your numerous correspondents which have of late appeared in the *Medical Times and Gazette* have embraced almost all subjects which are of special interest to the Profession; but there is one which has not yet been mentioned and which is certainly of sufficient importance to be taken up; I mean the state of orthopædics abroad. This branch of Surgery has for a long time been considered as below the notice of Medical men, and it is only recently that its importance has been sufficiently recognised. This negligence on the part of the Profession has left the establishing of Orthopædic Institutions to enterprising empiricists who tried their clumsy hand on any one unfortunate enough to fall into their clutches, and who pretended to cure by this means every short leg and crooked spine. Amongst others, I know of a fellow who for some years held the humble but useful position of dancing-master in a small town not very far from here; but from the gravity and solemnity, which never left him, either when giving lectures on the best way to please the ladies, or when performing the most astonishing *entrechats*, I should never have thought that he was not the right man in the right place. However, this was not his opinion, and he one day astonished the public by informing them that the degree of Ph.D. had been conferred upon him; and even there the ambition of the dancing philosopher did not stop. Believing the main chance to be the most important of metaphysical categories, he was one day struck by the idea that an Orthopædic Institution might be made the means of placing him above the daily struggle for existence which he thought unbecoming a philosopher. He therefore opened an establishment which was advertised as the Paradise of Hunchbacks. The therapeutic exertions of our friend being in no way restricted by pathological knowledge, he gave his inventive faculties the rein, and constructed no end of machines for making everything crooked straight. Notwithstanding his utter want of Medical education, he contrived to cure a few patients who had been given up, and after some years he found himself at the head of a thriving establishment. Imagine his grief when in the midst of his prosperous career one of his patients suffering from cyphosis whom he had very nearly succeeded in curing all at once died of spondylarthrocace and large abscesses formed on both sides of the spine, in spite of all pulling and pressing which had been done by the Doctor of Philosophy. It is to be hoped that he found consolation for this untoward circumstance in the contemplation of the laws of the universe and the eternal fitness of things.

Fortunately there are now scarcely any Orthopædic Institutions in Germany which are not under Medical superintendence; and this branch of Surgery has been very much developed within the last ten years. A great impulse was given it by the introduction of the famous gymnastics of Ling, the importance of which, however, was, of course, as is always the case with such new inventions, greatly exaggerated, and it was recommended by its panegyrists as a panacea for nearly all diseases; while, by the majority of the Profession, it was too much overlooked. Orthopædists are, at the present time, divided into two parties, one of which give preference to curative gymnastics, the other to the treatment by machines. The time which has elapsed since the former was introduced, is too short, and the reliable reports which have appeared on it are too few to allow the formation of a decided opinion, in which cases the one, and in which the other of the two methods ought to be preferred. Besides we must take into account the great differences which exist in the circumstances of the different institutions, such as situation, air, food, etc., the influence of which has a most important bearing upon the result, but which it is at the same time very difficult exactly to determine. Thus much, however, has now been ascertained, that in the treatment of deformities, curative gymnastics are of decided use, and if perseveringly carried out, are successful in cases where a weakness of certain muscles or sets of muscles is the cause of the deformity, and in which the preponderating action of their antagonists causes defective situation of certain parts of the skeleton. It is obvious that a local stimulus to the weaker muscles is, in such cases, suitable for curing the deformity caused by the muscles acting in the opposite direction, unless such changes in the bony parts should exist which cannot be conquered by muscular action. On the other hand, it is not to be denied that a judicious mechanical treatment alone may also be successful, if the local disease and the general health are attended to. The only difference is that the way in which the cure is brought about, is the reverse. The merely mechanical action is commonly believed to be curative in its effect, and it is said that by pressure and traction the abnormal position and attitude are conquered; but it is just as important a part of the treatment that the muscles which have preserved their normal action, but are relatively too powerful, become relaxed and extended, so that their action is diminished. Thus both these methods tend to restore, in different ways, the equilibrium between the different sets of muscles.

It is, no doubt, a great mistake for one party to consider the purely gymnastic treatment as being the "orthopædics of the future," and to believe their adversaries to be very much behind the civilisation and spirit of the age; but the supporters of the mechanical treatment are equally wrong to deny the usefulness of gymnastics. The question is not, whether one method is to be absolutely preferred to the other, but whether one is most likely to be successful in a given case. Curative gymnastics are most popular in large towns. The great majority of patients there are scoliotic girls, who, apart from their local complaints, have commonly symptoms of general illness, and suffer from chlorosis, anæmia, and scrofulosis, insufficient nutrition, laxity of muscles, etc. It is scarcely necessary to say, that in such cases, gymnastics is preferable to the treatment by machines, as the former is generally acknowledged to exert a very beneficial influence upon circulation, the general metamorphosis of matter and digestion, and thus, while curing the deformity, also strengthens the whole system. The case is quite different where patients are inmates of an establishment situated in the country, with all the advantages of a bracing air, exercise, games, etc.; and even with weakened patients, where the system is disordered, the treatment by machines agrees very well, and they soon recover from the illness brought on by insufficient nutrition, bad air, and want of exercise; the deformity is cured by the mechanical treatment, and the whole system stirred up by being placed under favourable influences.

As representatives of the two parties just described, I may mention Dr. Wildberger, of Bamberg, and Dr. Eulenburg, of Berlin; the former being an adherent of the mechanical, the latter of the gymnastic, or, rather, the dynamic method. Dr. Wildberger's establishment is situated on the Michael's-berg, near Bamberg, in Northern Bavaria, in a neighbourhood celebrated for its beauty, and known as Franconian Switzerland. The place affords a delightful view of the town at the foot of the mountain, and, further on, of the picturesque mountain-ranges in the distance. The air is mild and fresh. Extensive grounds, suitable for exercise and sportive games, are connected with the establishment. This and the good substantial diet, part of which is the celebrated Bavarian beer, causes the healthy looks of the patients, or, rather, inmates, to be a matter of surprise to the stranger. Everyone who has had the opportunity of seeing individuals with bodily deformities at home, knows that most of them are greatly depressed by, and ill-tempered on account of, their ailment. They are reluctant to participate in the innocent pleasures which are offered to childhood and youth, as they feel themselves to be ill-used by Fate; and they therefore become, according to their temper, either melancholic or malicious. Who does not recollect how Shakspeare, with deep psychological insight, greatly attributes the peculiar development of *Richard's* character to his deformity? If patients so afflicted are brought where they do not feel themselves to be objects of continual curiosity and pity, much of the depressing influence which their ailments had upon them before vanishes, and their spirits rise. The machines which have been successfully employed by Dr. Wildberger during ten years' practice, are ingeniously contrived, and enjoy the well-deserved confidence of the Profession. The curative results obtained by him have gained his establishment a high reputation.

Dr. Eulenburg, of Berlin, has for many years been at the head of the best known and most important orthopædic establishment of that city; it is situated in the northern extremity of the Friedrichs-strasse (the Oxford-street of the Prussian metropolis), and is certainly one of the very best institutions of its kind. I have already mentioned that Dr. Eulenburg prefers the gymnastic treatment as the most rational; but he is no fanaticist, and well knows where and when to stop. By a thorough study of the subject in Stockholm, he has gained a complete insight into the details of curative gymnastics, and is quite *au courant* with its practice. The exercises are gone through under his personal superintendence, both morning and afternoon, in the large and airy kursaal, special regard being paid to each single case, and the treatment being modified according to its individuality.

A very abundant material has afforded Dr. Eulenburg the opportunity of making original observations on the frequency of scoliosis from different causes. Among 300 cases observed by him until 1856, 264 (that is 88 per cent.) were caused by disturbance of the antagonistic action of the muscles of the back. Of the 36 others 14 were of a rickety and 5 of a scrofulous origin, 5 caused by trauma (not "a dream" as a contributor to the New Sydenham Society's Year-Book might, perhaps, imagine, but τραῦμα), 4 consequent upon congenital dislocation of the thigh, and 4 upon empyema. These results have been confirmed by later experience. The greatest frequency of the disease, in consequence of defective muscular action, is between the seventh and tenth years, at a time when the children generally go to school, and are confined to a sitting posture for four or six hours a day. The chief cause is, of course, the defective crooked attitude assumed by them while writing. Whole classes of children are seen sitting with the writing-book placed obliquely before them, so that the dorsal vertebræ form a curvature towards the right side. In cases where no disorganisation of the bones and ligaments was present, a treatment continued for from three to six months has generally been sufficient to effect a cure. If the case was one of long standing, the patient had also to assume a horizontal position for two hours in the morning and in the afternoon. The favourable results obtained have made Dr. Eulenburg's establishment a very popular resort of scoliotic ladies, to whom the hours of exercise are anything but tedious, if we may judge from the cheerful and animated conversation going on during the time.

Among other affections which have been successfully treated by local gymnastics, I may mention the manifold deformities of the scapula from weakness, or paralysis of the serratus anticus, the rhomboids, the levator anguli scapulæ; also pectus carinatum after paralysis of the serratus anticus and pectoralis major, with sinking of the ribs and lateral flattening of the thorax, emphysema, and relaxation of the muscles of inspiration. Dr. Eulenburg recommends gymnastics for improving the conformation of the chest, and increasing the capacity of the lungs in hereditary disposition to con-

sumption. In such cases, however, the treatment should be commenced in the twelfth or thirteenth year. Cases of so-called essential palsies of children, of paralysis of cerebral or spinal origin, were cured or considerably improved when the conduction was not altogether interrupted, and the continuance of the paralysis could partly be ascribed to the muscles which had in the meantime become partly atrophic.

Spondylarthrocace is also considerably improved by mechanical treatment. Dr. Eulenburg's method of treating this disease is as follows:—The patient is ordered to lie on the abdomen, and then a gypsum cast is taken from the back, embracing the posterior and lateral parts of the trunk, from the lower part of the nape of the neck to the cristæ iliacæ, including the posterior part of the axillæ. A piece of sheep-skin, slightly moistened, is then extended over the cast, closely following all protuberances; over this layers of starched thin pasteboard are placed, tile fashion. This process is repeated, and a piece of ticking is afterwards pasted over the whole. This apparatus is then well fastened with bandages, and placed in an oven to dry. When this is effected, the gypsum cast is removed, and the bandage which remains forms a sort of shield for the back, which corresponds most accurately to all protuberances and unevennesses of the back. Its thickness amounts to a few millimètres. This back-shield is then connected with an elastic half-stays for the front, which leaves the whole anterior wall of the thorax free, and laced along the middle of the anterior wall of the abdomen. Movable epaulettes, which cross each other in front of the chest, and serve to support the upper part of the trunk against the back shield, are put over the shoulders A complete apparatus of this kind for a boy of five years weighs no more than 10¾ ounces.

If this apparatus is used, and, at the same time, horizontal posture enjoined, we may in many cases expect very great benefit. The diseased segment of the vertebræ is by this means so fixed, that a vertical pressure can scarcely take place, even if the patient should momentarily place the back in a vertical posture, either from caprice or necessity. Irritation of the diseased part of the vertebræ is also prevented as far as possible, as the movements of the trunk are rendered impossible, and those of the arms and thighs very much reduced, so that no injurious influence can act upon the affected vertebræ. Frequently, in this manner, all advantages which Mr. Bampfield intended to produce by the prone system are obtained in a much more simple manner, which is, at the same time, much more pleasant to a patient, while the disadvantages of that proceeding—viz. the danger of migration of pus—is avoided. The treatment of this affection requires absolute quiet for a long time, and the patient should lie on the back; he may, for a change, take a lateral position, but he should not be allowed to get up or walk about. According to the different stages of this disease, the duration of the treatment varies (between six and eighteen months). The best couch is a mattrass of horse-hair and a small pillow, and the spine should be in a horizontal plane.

I conclude this letter by mentioning that, quite recently, a very accomplished young Physician, Dr. Frommann, of Berlin, has opened an establishment of the same kind, which is beautifully situated on the outskirts of Weimar, and replete with every comfort. Dr. Frommann has for some years resided in England, and his institute can be recommended to Englishmen travelling abroad who require orthopædic treatment.

PRUSSIA.

Berlin, August 10.

ON THE USE OF COLD IN SURGERY.

The last number of Professor Langenbeck's "Archives for Clinical Surgery" contains a most interesting paper by M. Esmarch, on the employment of cold in surgery and ophthalmology, an epitome of which will certainly be acceptable to you. Hippocrates and Celsus have already recommended the use of cold in fresh wounds of every kind; but this remedy shared the fate of many of our most important medicaments, being at several periods recognised and recommended by the most eminent Surgeons of their time, and then again falling into oblivion. In recent times it has been again taken up and extensively employed, especially in military surgery. It has proved to be one of the best antiphlogistic remedies, without which (says M. Esmarch) he would throw up Surgery altogether. There are still, however, many Surgeons who do not employ cold at all in inflammation, and who believe that its use causes gangrene, phlegmone, tetanus, rheumatism of the joints, inflammation of internal organs, etc. This fear of the application of cold is certainly either inherited from the teacher, or it is due to the bad results which follow an injudicious employment of cold. Failure in such cases can as little deter the Surgeon from using it in practice, as the deadly effect of large doses of opium will ever induce the Physician to strike this remedy out of the Pharmacopœia. In whichever way cold may be applied, its proximate and immediate effect is always that it withdraws more heat from that part of the body acted upon than it would lose under ordinary circumstances. This withdrawal of heat is a strong local stimulus, and effects as such an energetic contraction of the organic muscular fibres of the skin and the blood-vessels. If the application of cold is soon afterwards discontinued, the blood-vessels again dilate, and more blood is carried to the parts; but if it is employed for any length of time, less blood is supplied, and the local metamorphosis of matter is limited, because the tissues of that part of the body which has been subjected to the action of cold, gradually assume so low a temperature, that the chemical processes within them are more or less impeded. Elevation of temperature, however, is, according to the most recent researches, one of the most important symptoms and the chief element of inflammation; the increased temperature is only caused by an increased metamorphosis of matter, and by a larger supply of blood to the vessels of the inflamed part. It is, therefore, evident that cold, diminishing as it does the temperature of the inflamed parts, and cutting off the sources of the abnormal local heat, is one of the first antiphlogistic remedies, the action of which is, however, not confined to the local process. We may, in fact, if we apply cold for a certain length of time, and to a sufficiently large part of the body, even diminish the morbid heat of the whole blood (fever), as the blood which is propelled from the heart through the vessels of the cooled parts, has continually a large amount of its heat abstracted; so that at last the thermometer, applied to any part of the body, shows an evident diminution of temperature.

We may employ cold, either wet or dry; the former by means of wet fomentations, immersion and irrigation, the latter by means of bladders and bags. The most common method is that of bandages, cooled either with cold water or ice; this is the least certain way, for if they are not very frequently renewed they prevent the radiation of heat from the parts, and therefore increase, instead of diminishing, the heat; but if they are changed very often, the temperature may be permanently diminished. The continual touching and troubling of the inflamed parts, the almost inevitable wetting of the linen and blankets, and the injurious results consequent upon this, are, however, so serious drawbacks, that this method should never be employed, at least not in severe cases.

The local bath, or the immersion into, and the irrigation with, cold water is much more useful. The withdrawal of heat is, by both these methods, very considerable, as during irrigation new quantities of cold water come continually into contact with the surface of the inflamed part, and during immersion currents are produced in consequence of the heating of those layers of water, which are nearest the immersed part, so that the colder layers come continually in contact with the surface of the immersed part. For this reason the water must not be of too low a temperature, as otherwise freezing would follow. Warm baths of 80° to 94° F. are, therefore, in this sense antiphlogistic, as there is still a considerable difference between the temperature of the body and that of the bath. One inconvenience of this mode of application is, however, that we cannot prevent the effect of wet, which is generally not at all desired. Swelling of the epidermis, imbibition of the wounded surfaces, and rheumatic pain, frequently comes on in consequence of the cooling of neighbouring healthy parts; the pain especially becomes sometimes insupportable to the patient; besides which, both these methods can, unless very complicated contrivances should be at hand, only be used for the extremities, and even in them only up to the upper third of the arm, and below the knee, so that the inflamed parts must generally be kept in an inclined plane. These are inconveniences which very much diminish the value of these two methods.

The most certain and least inconvenient way is to employ dry cold by means of bladders or bags of vulcanised india-rubber, filled with ice, which are far preferable to animal bladders; these latter are not quite waterproof, and after some time begin to smell offensively. They are likewise better conductors of heat than india-rubber, so that freezing may be the consequence if they are employed for any length of time. Another advantage of these bags over animal bladders is their durability, as they will, if carefully used, last many months, and are therefore very suitable for Hospitals.

When no ice is to be had, M. Esmarch recommends the application of dry cold by means of reservoirs made of such matter as conducts heat well, as glass or metals, and which are to be filled with water which should be frequently renewed.

In treating poor patients, M. Esmarch has often employed common medicine bottles filled with cold water, well-corked up, and changed as soon as they became warm. These may be used in the axilla, the palm of the hand, the inguinal region, and on the neck. The forearm and the calf may be placed on wine-bottles filled with water; on other parts, as the chest and abdomen, flat gin-bottles should be used. For the back and the nape of the neck, boxes of thin sheet-iron are suitable, one surface of which is made so as to fit closely the part of the body. These are filled with cold water by means of a funnel and emptied by means of a syphon, as soon as the water has become warm.

The constant withdrawal of heat should be resorted to in all acute and violent inflammations, especially of important parts, either superficial or internal organs, such as the heart, the lungs, etc. In many cases of chronic inflammation, especially of the joints, cold has also been found so efficacious that it ought not to be neglected.

As to the time during which the cold should be employed in a given case, it is not well to limit it to the first stage of inflammation, but it ought to be continued even if suppuration and gangrene (when due to violent inflammation) have set in, as these processes take a much more favourable course when treated by cold than by cataplasms. The sensations of the patient have to guide us in the question how long the cold should be continued at a time. If the withdrawal of heat becomes unpleasant, or if rheumatic pains come on, the application of cold must be discontinued.

Bonn, August 12.

THE STRUCTURE OF THE RETINA.

At a recent meeting of the Society of the Lower Rhine, Prof. Max Schultze communicated the results of his researches on the structure of the retina, especially at its most sensitive part, the yellow spot of Sœmmering, and the *fovea centralis*. As this spot is not found in any animal, with the exception of the monkey, the examination of eyes of other animals has, of course, not been able to elucidate this important point. It appears surprising that no attention has yet been paid to the eyes of monkeys, which are the only ones that are at all similar to human eyes in this respect; so much the more as it is extremely difficult to examine the human eye so soon after death, that its subtle structure has not yet had time to be changed. It is, therefore, a great merit on the part of Professor Schultze, that he has endeavoured to clear up this point by comparing fresh eyes of monkeys with the human eyes, as soon as possible after life had become extinct. The result has been that the arrangement and the diameter of the percipient elements in the yellow spot and the *fovea centralis* are almost identical in the eye of *Macacus cynomolgus* and in that of man. It may, therefore, be concluded that this species of monkey has nearly the same range of vision as man. The following are a few details of Professor Schultze's researches on this subject:—

The transverse section of the percipient elements in the *fovea centralis* of the human eye is very much less than that of the cones on the yellow spot; being only very slightly larger than the rods, and forming a very regular mosaïque. Accurate measurements have shown that the diameter of the smallest percipient elements of the retina is only half that hitherto assumed, so that a greater uniformity of results of the direct anatomical observation and of physiological calculation has now been brought about. The transition of the cones of the yellow spot into the corresponding part of the *fovea centralis* is so gradual, that the sentient elements of the latter, although their diameter resembles more that of the rods, should rather be called very small cones. There still remains, however, some contradiction, inasmuch as Professor Schultze has proved that the cones of the more peripheric parts of the retina are connected with fibres of cellular tissue of the retina, and cannot, therefore, be considered to be percipient elements. The proportion of cones and rods remains quite the same with the exception of a small circle round the yellow spot extending to the ora serrata. Professor Schultze has also again discovered the oblique fibres of connective tissue first described by M. Bergmann, which belong to the inner part of the outer granular layer and from the *fovea centralis* proceed radially outwards. It is possible that a hypertrophy of these elements may, under certain circumstances, cause central blindness. The same gentleman has observed an œdematous swelling of this membrane in human eyes, which was confined to a few points and had thickened and distended the membrane.

CANCER OF THE BREAST.

Professor C. O. Weber showed to the Society two scirrhous breasts which he had just removed from a woman in good general health, in one sitting, the patient being under the influence of chloroform. The case, which has had a very favourable course (the cure being now nearly complete), was in so far interesting, as the neoplasm spread directly from one breast to the other, which is of very rare occurrence, as usually the lymphatic glands in the corresponding axilla are affected before the tumour appears in the other breast, or little scirrhous nodes in the skin creep forwards from one point to the other, and at last cover the whole of the thorax—a form to which M. Velpeau has given the significant name of "*squirrhe en cuirasse.*" No trace of this was seen here. The patient had, four years ago, first remarked a node in the right breast, and eighteen months ago a node had also appeared in the left. Both were very firm and hard as wood; and there was a considerable scarry contraction and evident fatty degeneration. The nipples were also attacked. The question was now, whether the operation, which was urgently desired by the patient, on account of the never-ceasing pain, might not better be performed in two sittings; but as it was to be expected that after the removal of one breast, the node would grow much more rapidly in the other, and that a second operation soon following the first, would be connected with fresh danger and inconvenience to the patient, Professor Weber determined to amputate both breasts at once, especially as the general health of the patient was very good. For the sake of greater security, both mammæ were completely excised, as we consider it necessary in malignant tumours, which tend to infect the neighbouring tissues, to keep as far as possible away from the boundary of the diseased parts. The cure was unusually rapid, there was a trifling suppuration, but the patient is so well that she will be shortly discharged.

TYPHOID FEVER.

Professor Albert spoke on the abortive treatment of typhoid fever by hydropathy. He seemed to be, on the whole, favourable to this method of treating that disease; but almost all the speakers who took part in the discussion, expressed their conviction that it would be extremely difficult to determine in a case of quick recovery, whether it had been really one of typhoid fever; whilst in well-determined cases of this affection, an abortive treatment was impossible.

PSEUDO-ERYSIPELAS.

Dr. Zartmann communicated his observations on malignant gangrenous pseudo-erysipelas, which appeared spontaneously in a village where malaria is endemic; but it did not appear to be contagious. A case of pustula maligna was narrated, in which there had been a stage of long incubation, which is very rare in that affection. A man was attacked by it long after he had skinned cows which had died of anthrax.

Vital Statistics of Genoa.—For the year 1859, the population amounted to 119,610, viz., 69,912 males, and 58,698 females. The births were 4465, viz., 2302 males, 2163 females; of these, 3781 were legitimate, and 681 (470 living and 211 dead) illegitimate. There were 852 marriages, and 5039 deaths, viz., 2874 males and 2165 females. The births were 37·45 per 1000, the marriages 7·12, and the deaths 41·99. The number of deaths was increased in 1859 by reason of the number of soldiers filling the Military Hospitals in that year, and the overcrowded state of the prisons.

GENERAL CORRESPONDENCE.

TREATMENT OF DELIRIUM TREMENS BY LARGE DOSES OF TINCTURE OF DIGITALIS.

Letter from Dr. Carey.

[To the Editor of the Medical Times and Gazette.]

Sir,—As the treatment of delirium tremens by large doses of tinct. digitalis is still in its infancy, perhaps the narration of a few cases which have occurred in my practice since Mr. Jones's report, will not prove uninteresting. The hesitation which I at first entertained in prescribing these large doses, induced me to give our hitherto recognized sheet-anchor, opium, a fair chance; but it will be seen how egregiously its character was belied by the results, it being actually instrumental in aggravating the sensorial excitement, though no contra-indication existed to its administration.

P. B., aged 42, carpenter, was admitted into the Hospital February 26, 1861, with well-defined indications of delirium tremens. I was requested to visit him the previous day at his own house, and found him labouring under all the hallucinations of the disease consequent on a protracted debauch of some weeks, which had depressed and enervated a naturally feeble system. For nearly three weeks he had been unable to procure any refreshing sleep. During this day, I prescribed four grains of solid opium and 5j. of tinct. opii, which produced the inverse effect of aggravating the cerebral excitement. The evening of the day of his admission, I administered a half-ounce dose of tinct. digitalis, with an equal quantity of gin, which, after the lapse of half an hour, caused him to fall into a deep sleep, which continued with one brief intermission for twelve hours. He awoke quite rational, and two days subsequently was presented cured. The digitalis did not produce its alleged results, diarrhœa and vomiting, nor were the kidneys stimulated to increased action.

R. C., aged 30, after a prolonged course of dissipation, was seized with unmistakeable symptoms of delirium tremens. On his removal to the Hospital, which was necessitated by his extreme violence, eighty drops of laudanum were given. At eight o'clock p.m., as there was no mitigation of the delirium, an additional dose of forty drops was ordered. The night was spent in wandering and in attempts to escape from restraint. The following morning, after a copious evacuation, he was ordered a combination of laudanum (forty drops), and antimony, which was repeated after four hours. He had then taken the equivalent of at least ten grains of opium in twenty-four hours. In the evening, as no amelioration had taken place, the half-ounce dose of digitalis was administered, with an equal quantity of gin. His condition throughout the night was calmer, and for four hours he enjoyed undisturbed sleep. No further treatment was deemed necessary, notwithstanding that he continued somewhat disposed to be boisterous during the next twenty-four hours. A subsidence of this soon took place, and he was dismissed cured at the end of the fifth day from his admission.

A third case occurred in a gentleman, aged 28, whose nervous system had also been subjected to the effects of prolonged alcoholic drinking. Opium was equally generously administered, but, as in the preceding cases, its inefficiency was most manifest. Recourse was had to the digitalis with such good results, as to tranquillise our patient, who had been afflicted with the most soul-torturing delusions it has yet been my lot to witness.

The fourth case has occurred within the last few days in a man, aged 25. He is the subject of epilepsy, induced by his habits. His appearance betokened serious disease of the heart, confirmed by auscultation, which detected an aortic systolic murmur, with extensive hypertrophy. This patient's daily consumption of raw spirit was not much below two to three pints. Aberration of mind quite characteristic. Opium was again resorted to, but its shortcomings were as evident as in the other cases. Half an ounce of digitalis was given in the morning. Notwithstanding my remonstrances, the patient left his room and wandered about the house, much quieted, however, till he retired to bed at his usual hour. Next morning, I found him calm and composed, having had a few hours' sleep. The immediate effect of the digitalis here, was to equallise the circulation, and to restore warmth to the extremities, chilled by his morning's walk.

This latter case is interesting, as indicative of the non-injurious effects of wholesale doses of digitalis in cases where morbus cordis exists. This condition of the heart, though not to the same extent, was detected in the preceding case. In any of these cases, should the first dose of the digitalis not have sufficed, I would not have scrupled administering a second, as the influence on the pulse was not such as to offer any barrier to its repetition. In proffering these remarks, I cannot avoid expressing deep satifaction for the application of a drug to the cure of a disease, which, hitherto, has very frequently resisted the most heroic treatment. From my small experience I cannot but entertain the hope that the mortality, which has been due, without exaggeration, as much to the large doses of opium as to the unrestrained development of cerebral complications, will be strikingly diminished.

I am, &c.

Guernsey, August 14. Francis E. Carey, M.D.

AMPUTATION OF THE PENIS BY THE ECRASEUR.

Letter from Dr. Whitehead.

[To the Editor of the Medical Times and Gazette.]

Sir,—As much has been said of late of amputation of the penis, perhaps you may deem the following case worthy a place in your journal. I was called in consultation, some few weeks since, to visit a patient in the Hospital here, who had a cancerous growth of the penis, by which, within the last few days, he was prevented from passing urine, except in driblets, which caused excruciating agony. Upon my visit I found him suffering considerably, and at once agreed, with the other Surgeons, that amputation was the only remedy; but from his age (64 years), the Head-Surgeon feared after hæmorrhage. I suggested whether the écraseur would not be worthy a trial, upon which he had his doubts. As, however, I had operated with it successfully several times, he acceded to my suggestion, whereupon the man was placed under the influence of chloroform, a ligature being first applied, the écraseur was then applied, and to the satisfaction of all present, the amputation was successfully performed, without the loss of scarcely a drop of blood. A good covering to the penis being left, all that was required to be done was to tie a catheter in the urethra for a few days. The man left the Hospital perfectly well on the seventeenth day after the operation, and has remained so ever since.

I am, &c.

Boulogne, August 6. T. Whitehead, M.D.

DEPRESSED FRACTURE OF THE SKULL.

Letter from Mr. McCourt.

[To the Editor of the Medical Times and Gazette.]

Sir,—If you consider the subjoined case worthy of recording, you will please give it a corner in your valuable journal. On October 8, 1860, I was requested to visit R. M., aged 16 years, and was informed that nine days previous he had received a kick on the head from a horse, which produced insensibility for about half-an-hour; that he had been seen by a Medical man soon afterwards, who informed the boy's friends that his skull was fractured, but did not attempt to do more than simply dress the wound with adhesive plaster: this, with some purgatives, were the only things done for him up till the time I saw him. It appeared that, about the sixth day after the accident, symptoms of compression of the brain set in, when another Medical man saw him, but declined to do anything, as he considered the case hopeless. On examination, I found a scalp-wound almost healed over a well-marked depression on the left side of the occipital bone; paralysis of the opposite side of the body; pupils largely dilated; pulse 48. Occasionally he would recognise his friends, and perhaps beseech them for "God's sake" to cut off his head, so intense were his sufferings; at other times he would be completely delirious, uttering frightful screams, with constant rolling of his head on the pillow, and tossing about the leg and arm of the unparalysed side.

As the only chance of saving his life was to remove the depressed bone, and as his friends consented to anything that gave a shadow of hope, I performed the operation (assisted by a worthy young Medical man, now deceased), by making the usual crucial incisions, and dissecting back the flaps. We found a depression of fully two inches in length, and over one in breadth. By removing a V-shaped portion of bone from the ridges which surrounded the depression, I was able to insert an elevator, and with some difficulty dislodge the comminuted bones. A large portion of loosened bone which ran towards the base of the skull we simply elevated. During the operation there was profuse hæmorrhage, and at one time we dreaded the lateral sinus had given way, as there was a great welling up of venous blood; but fortunately we were mistaken. After removing any spicules that appeared, we adjusted the flaps, and applied cold-water dressing to the wound and cold lotions to the head.

On visiting him next day, there was a decided change for the better; the paralysis was partially gone, and the pulse had risen to 65. We adopted a strictly antiphlogistic regimen, and got him under the influence of mercury as soon as possible. He continued steadily to improve, and the wound was completely healed in three months without a single bad symptom. He is at present in robust health, and able to follow his employment as a farm-labourer. The depressed pieces of bone weighed at the time of their removal over two drachms.

I am, &c.

ARTHUR MCCOURT, L.F.P.S.G.

Rathfriland, Ireland.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, August 15, 1861:—

Brunton, Linton Bennett, Waterloo-place, Limehouse
Fisher, Luke, Chorley, Lancashire
Gardner, Edward Barton.

The following gentlemen also on the same day passed their First Examination:—

Eddowes, Joseph, Swinton-street
Joyce, Thomas, Newbury, Berks
Le Tall, William James, Woodhouse, Sheffield
Newton, John L., London Hospital
Shepherd, Charles D., Frederick-street, Gray's Inn-road.

APPOINTMENTS.

CARY.—Tristram Cary, M.D. St. Andrews, L.F.P.S. Glasg., L.R.C.S. Irel., has been appointed Medical Officer to the Claudy Dispensary, County Londonderry, vacant by the decease of James Douglas Smyth, M.R.C.S. Eng., L.M. Edin.

CORNISH.—William Neyle Cornish, of Modbury, L.S.A. Lond., has been appointed Medical Officer for the Ugborough District, in the Totnes Union, Devonshire, in the room of Mr. John M. B. Langworthy, resigned.

IRVINE.—George Richard Irvine, M.R.C.S. Eng., Resident Medical Officer to the Royal Free Hospital, has been elected Assistant-Medical Officer for the Female Department of the County Lunatic Asylum, Colney Hatch.

LUKE.—James Luke, F.R.C.S. Eng. (Hon.) has been appointed Consulting Surgeon to the London Hospital, on retiring from the post of Surgeon.

MOORE.—David Moore, M.R.C.S. Eng., has been appointed Medical Officer to the Articlave Dispensary, County Londonderry, in succession to Wm. Taylor, M.D. Univ. Edin., L.R.C.S. and L.M. Edin., deceased.

WALSH.—Thomas William Walsh, Fell. and M.R.C.S. Eng., has been elected Surgeon to the Worcester Infirmary, in the room of Mr. Carden, resigned.

DEATHS.

DOUGLAS.—July 25, at No. 10, Bleaker-street, New York, Robert Douglas, M.D., a native of Lochwinnock, Scotland, Graduate of Glasgow University, and Practitioner in that city for twenty-five years.

EASTON.—August 14, at Scotland-street, Edinburgh, Robert Tulloch Easton, Surgeon R.N. (Seniority, March 7, 1842.)

FRANKUM.—August 16, suddenly, of apoplexy, Richard Frankum, of Burlington-gardens, M.R.C.S.E. L.S.A. Lond.

HADDOCK.—August 17, Joseph Wilcox Haddock, of Higher Bridge-street, Bolton, Lancashire, M.D. St. Andrews, L.S.A. Lond., aged 61.

RIADORE.—August 18, Evans Riadore, of the Cottage, Chettiscombe, Tiverton, Devonshire, M.D. Giessen, Fell. and M.R.C.S.E., L.S.A. Lond. (retired).

STEWART.—July 4, at Calcutta, of pleurisy, James Stewart, jun., L.F.P.S. Glasg. (son of James Stewart, of South Portland-street, Glasgow, M.D. Univ. Glasg.), aged 24.

LONG LIFE IN ENGLAND.—It speaks well for the healthiness of England that in the year 1859, for which the returns have just been published, the list of deaths included 25 men and 56 women who had attained what Dr. Farr calls "the natural lifetime of a hundred years." The oldest man in the obituary of the year died at Sunderland, aged 107; but a woman in Wokingham district, Berks, was 108, and two women, one in Monmouthshire and one in South Wales, had reached the patriarchal age of 110. Of these centenarians eight were found in London; the county that could boast the largest number is Somersetshire, in which there were seven.

DR. ALDIS has suggested a modification of the ordinary syringe, which may be found extremely useful in cases of diphtheria or sore throat, particularly in children who do not know how to gargle, and thereby often sink under these diseases, or in adults who may be too weak to do so from prostration. The tube at the extremity of the instrument is curved, and so perforated that the fluid can be directed horizontally as well as obliquely upwards from several openings, and can be spread over the inside of the mouth—an advantage over those which are provided with only one aperture. The syringe is made by Savigny and Co., 67, St. James's-street.

PRIZE SUBJECT OF THE MEDICO-CHIRURGICAL ACADEMY OF FERRARA.—This Academy offers for 1862 a prize of a gold medal, value 100 scudi, for the best Essay upon "The Clinical Validity of the Doctrines on Cellular Pathology now taught in the Schools of Germany." Besides the histological and physiological exposition of these doctrines, facts and observations are required in illustration of and in contribution to diagnosis, pathological anatomy, and rational nosology. The Essays, written in the Italian, Latin, or French languages, to be forwarded to the Secretary of the Academy by June 30, 1862.—*Annali Omodei*, July.

DESTRUCTION OF INFANT LIFE.—Of the deaths in England in 1859 no less than 184,264—two in every five of the deaths of the year—were of children under five years of age; and above half of these—105,629—had scarcely seen the light, and never saw one return of their birthday. A very large number of these early deaths are from debility and causes which prove that the children never had much chance of life, but many are suffocated, or otherwise killed, accidentally, carelessly, or worse. In the last five years, within the metropolitan district alone, at least 278 infants were murdered; above 60 were found dead in the Thames, or the canals or ponds about London, and many more than 100, at all events, were found dead under railway arches, on doorsteps, in dust-holes, cellars, and the like.

THE NEW VACCINATION ACT.—This Act provides for the appointment of a prosecutor at the expense of the Poor's Rate in the case of any parent or guardian neglecting or wilfully violating the law:—Whereas it is expedient to make further provisions in relation to proceedings before justices under the following Acts; that is to say, an Act passed in the session holden in the third and fourth years of the reign of her present Majesty, chap. 29, intituled "An act to Extend the Practice of Vaccination;" an Act passed in the session holden in the fourth and fifth years of the reign of her present Majesty, chap. 32 intituled "An Act to amend an Act to Extend the Practice of Vaccination;" an Act passed in the session holden in the sixteenth and seventeenth years of the reign of her present Majesty, chap. 100, intituled, 'An Act further to extend and make compulsory the Practice of Vaccination:" Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present Parliament assembled, and by the authority of the same as follows:—1. This Act may be cited for all purposes as "The Vaccination Acts Amendment Act, 1861." 2. The guardians of any union or parish, or the overseers of any parish where the relief of the poor is not administered by guardians, may appoint some person to institute and conduct proceedings for the purpose of enforcing obedience to the said Acts or any of them, within their union or parish; and as to all expenses incurred by any person so appointed, or by any registrar of births and deaths, or by any Medical Officer of Health appointed under an Act of Parliament, in proceedings for enforcing penalties under the said Acts or any of them, if

the justices or court before whom such proceedings are had certify that such expenses ought to be allowed, such court or justices shall ascertain the amount thereof, and such amount shall be payable out of the rates for the relief of the poor of the parish where the person for the time being dwells in respect of whose default or offence the same were instituted; and the court or justices shall ascertain the amount of such expenses. And proceedings for enforcing penalties under any of the said Acts, on account of neglect to have a child vaccinated, may be taken at any time during which the parent or guardian is in default.

Physical Training.—Among the Parliamentary Papers recently issued are two small volumes containing some information collected by Mr. Edwin Chadwick during the recent education inquiry. Mr. Chadwick shows in these papers that the present practice of long hours of teaching is a wide cause of enervation and predisposition to disease, and induces also habits of listlessness and dawdling. The half-time system is found to give nearly, if not quite, as good education as the whole time; and common sense tells us that a boy who has acquired the same amount of knowledge in half the time of another boy must have obtained a proportionately superior habit of mental activity. It is this alertness, combined with the bodily aptitudes created by drill, that gives the comparatively stunted boys of the town a preference over the strong robust lads from the coast. Good schoolmasters say that about three hours a day are as long as a bright, voluntary attention on the part of children can be secured, and that in that period they may be really taught as much as they can receive; all beyond the profitable limit is waste.

Death of Professor Quekett, F.R.S.—John Quekett, known far and wide in the Profession for his amenity, his large stores of information, and the cheerful willingness with which he imparted these to whoever sought for them, died on Tuesday, the 20th, having suffered from bad health for several years past. So identified has the Museum of the College of Surgeons been with the names of the only three Conservators it has had—Clift, Owen, and Quekett—that it behoves the Council to take care that any successor they may appoint may not be unworthy of comparison with these distinguished men.

The Battle of Bull Run.—The *American Medical Times* reports, what for the honour of mankind we hope will turn out untrue, that Dr. Powell, one of the New York Surgeons, who had left a good practice to join the army, was brutally murdered while engaged in placing the wounded in the ambulance. Professor Hamilton, who was present at the engagement, gives an account of the privations which both the troops and their Medical attendants had to undergo. After describing how he and others of his staff had employed themselves in making soup and coffee while waiting the progress of the battle, he says, "We carried whiskey to those soldiers who had been skirmishing, or who seemed especially to need it; for they were without shelter, under a sky of brass. To those who called for it, we sent or carried pails of water—such water as we could get. The men never left their lines, and must have perished except for some such refreshments." During the retreat, while attending to the wounded at Centreville, he says, "We had no bandages, no lint, sponges or cerate, but very little water, and I think only one basin. . . . . In the old stone church the men were lying on every seat, between all the seats, and on every foot of the floor; a few on stretchers, a dozen or more on blankets, occasionally on hay or straw, but mostly on the boards. It was dark, and we had but two or three candles. These men had been waiting longer, and were in general more severely wounded; and although now and then a man asked us to pass him by, and to look first after some one lying near who was suffering more; yet from all sides we were constantly begged and implored to do something for them. After a little we concluded to take them in the order as they lay, since to do otherwise rendered it necessary to consume time in going backwards and forwards, and we were in constant danger of treading upon the wounded,—indeed, it was impossible to avoid this. By this time we had found a Hospital knapsack, and were pretty well supplied with bandages. But the time did not allow us to do much more at first than extract the bullets and apply cold water-dressings with lint. Only two amputations were made by myself, but, I confess, done very badly: but I could, under the circumstances, do no better; my back seemed broken, and my hands were stiff with blood. We still had no sponges, and scarcely more water than was necessary to quench the thirst of the wounded. . . . . Dr. Damainville and I now laid down upon our backs upon the floor beside the wounded. We could do no more—our last candle was burning. Some of us had seen all the wounded, probably 250 in number, and done for them all that lay in our power. I had drank some buttermilk and eaten a sandwich, which Adjutant Washburn had held to my mouth once in the evening; but none of us had any other food. The two bottles of whiskey taken by my son from the ambulance, were already nearly distributed to the wounded. They had not a morsel to eat, and all the ambulances had been gone for hours (the drivers had become frightened, and would not remain). When we went into the street again, we found that it was silent as the grave. The pickets were even gone, and except a few men so soundly asleep under the trees that we could not awaken them, there was no one left in the road. After a second consultation, *we determined to go also*. I went back to the church and found a soldier just brought in, whose wounds I dressed, and then said aloud to the poor fellows within, 'Thank God, my boys, none of you are very seriously injured; you will probably all get well.' To which I heard one or two feeble responses, 'Thank you, Doctor, thank you.' I could not tell them that I was about to leave them, and I trust in leaving so I did them no wrong. I could be of no more service to them until morning, and then I presumed that they would be in the hands of a civilised and humane enemy, who would care for them better than we could. As I passed along out of the village, I requested one gentleman who lived there to look after them, and also a family composed of a man and wife and two daughters. They all promised to do what they could." We should have liked to have been able to extract more from Professor Hamilton's letter. With respect to the question of *leaving the wounded*, the Editor of the *American Medical Times* observes:—"Until some definite understanding is had, we would advise the Surgeon, if he is in danger, to leave his wounded whom he can neither remove or relieve. The case is different in a permanent Hospital, where there are sick and convalescents from amputations and resections. This is usually in a large town; and if the place is taken, we would recommend that one at least of the Medical staff should remain with the necessary attendants. We hardly think that even the South would offer such a defiance to the public opinion of the world, and such an outrage to humanity, as to violate the Hospitals of a captured town."

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 17, 1861.

BIRTHS.

Births of Boys, 889; Girls, 810; Total, 1699.
Average of 10 corresponding weeks, 1851–60, 1621·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	642	615	1257
Average of the ten years 1851–60	596·9	582·7	1179·6
Average corrected to increased population..	..	..	1218
Deaths of people above 90	1	3	4
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	1	7	5	1	5	1	34
North ..	618,201	1	1	6	6	10	10	46
Central ..	378,058	1	2	7	1	7	1	25
East	571,129	1	2	8	3	12	10	43
South ..	773,160	1	2	16	4	11	12	60
Total.. ..	2,803,921	5	14	42	15	45	34	208

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·762 in.
Mean temperature	65·3
Highest point of thermometer	89·3
Lowest point of thermometer	49·8
Mean dew-point temperature	58·0
General direction of wind	S.W.
Whole amount of rain in the week	0·17 in.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

G. T. R. will find the best account of the *Actea Racemosa* in Dr Simpson's Lecture on the Treatment of Amenorrhœa.

Junius.—We should think that the prodnction of the Midwifery ticket, and the certificate of service at the Maternity Charity, would enable onr cor respondent to go up under the old regulatiens—but the question shoull be put to the Secretary of the College.

PHYSICIANS OR PRETENDERS?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A correspondent who signs himself "M.D., F.R.C.P." in your last number, whilst attempting to define what it is which constitutes the right to the title of Physician, seems to assert that all those who practise Medicine without a Medical Degree obtained from Oxford or Cambridge, or a licence from the College of Physicians, are in reality only *pretenders* to the title of Physicians.

Now, as the great majority of those who profess to practise as Physicians in the provinces and who frequently at the same time fulfil the duties of Physicians to public Hospitals, are neither graduates of Oxford or Cambridge nor members of the College of Physicians, it would seem to follow from your correspondent's assertions that all such men have no legal right to consider themselves Physicians at all. What is it, therefore, I would ask, which constitutes a Physician? Has not anyone who has obtained by fair and honourable examination the Degree of Batchelor or Doctor of Medicine either at London or Dublin or at one of our Scottish Universities, the right to consider himself a Physician and to practise Medicine?

I am, &c.

Clifton, August 19. QUÆSITOR.

THE WISE MEN OF THE EAST.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your correspondent "L. C.," in last number, when alluding to another recent contributor to your pages who spoke of the late Lord Campbell's large brain, is much displeased at the remark made by that authority, regarding Eastern Scottish men having often greater brainular development than those born elsewhere. He seems further dissatisfied that no mention was then made of Glasgow, which has become within a few years so remarkable in many respects; while he says, "it is very droll, if the brains of its people are not equal to the brains about twenty miles to the east." This notion may be entertained by "West-country folk," but they should look into history, where it appears that, "wise men always come from the East," and that Scotland forms no exception to the above old axiom. Even some of the eminent persons stated by "L. C." as conferring fame on Glasgow, were natives of eastern districts of Caledonia. Thus, of the notabilities he quotes, Dr. Reid was born in Kincardineshire, and Dr Adam Smith in the town of Kirkcaldy, Fifeshire. Nay, if I am not mistaken, at least three of the Professors at present shedding lustre on the western Alma Mater, actually came from eastward. In addition to such apt illustrations of the point at issue, I would say, many other distinguished Scotish men were born in the regions designated by the gentleman describing Lord Campbell's autopsy, and some of whose names at this moment appropriately offer themselves to my hasty recollection. For example, the "Admirable Crichton" and that phenomenon "Dcuis Scotus" were both natives of eastern districts. Again, John Knox was also born in East Lothian; Hume, the great historian, in Edinburgh; Robertson, also an historian, at Borthwick, not far distant; Fergusou the astronomer in Banfshire; Professor Playfair, the philosopher, in Kincardineshire; Bishop Douglass, the classic author, Andrew Melville, and Erskine of Dun, all in Angus-shire; besides many more eminent easterns, who could be easily specified if necessary. However, to confine my list to a few modern instances of highly-gifted men having their birth-places in the eastern provinces of North Britain, besides the late Lord Chancellor and Sir David Wilkie, named by your contributor as east-land men of eminence, I would record Dr. Chalmers, likewise born in Fifeshire, Sir Walter Scott in Edinburgh, Sir James Macgregor, Abercrombie, and the two Gregorys in Aberdeen, Sir Alexander Burnes, Sir William Burnett, and Joseph Hume, in Montrose, while last—but not least—the learned botanist Brown, near Montrose, as also various other lately deceased celebrities, natives of eastern Scottish countics. Here to meution any living instances illustrating the above curious local peculiarity would be invidious; still, to pass over one wonderful man is impossible, viz., Lord Brougham, who was born in Edinburgh.

I readily admit, the West of Scotland may well boast of its physical progress, and late gigantic advancements towards material civilization. Nevertheless, the East yet bears the palm in reference to intellect, as it has ever done heretofore. To prove that inference, impartial critics need only recall to recollection this fact, namely,—on the east coast of Scotland there are three Universities; whereas in the populous and, as "L. C." justly asserts, otherwise most important western portion, but one institution of the kind exists for promoting learniug among an immeuse and wealthy community.

Finally, although I coincide with your original contributor in many of his conclusions, I am quite a different individual, being merely, Sir, &c.

August 17. F.R.S.

COMMUNICATIONS have been received from:—

M. CLAUDE BERNARD; Dr. J. ARNOTT; Mr. SOELBERG WELLS; Mr. GRANTHAM, Crayford; Dr. W. J. MOORE, Bhooj; Dr. CAREY; Dr. WHITEHEAD; Dr. WILLIAMS, Swansea; Mr. ROLSTON; Mr. RAWDON; Mr. J. DODD SWALLOW; and onr Correspondents at Liverpool, Dubliu, Zurich, Berlin, Vienna, and Bonn.

APPOINTMENTS FOR THE WEEK.

August 24. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

26. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

27. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

28. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

29. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

30. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday next:—

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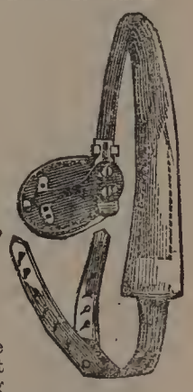

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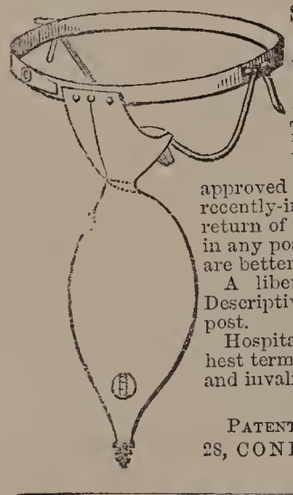

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Lecture I.

ANATOMICAL PECULIARITIES OF THE SPINAL COLUMN.

Introductory and General Observations—Healthy Anatomy of the Spinal Column—Its Anatomical and Mechanical Construction—Relative Proportions of the Intervertebral Cartilage and Bone in the Length of the Spinal Column—Compressibility of the Intervertebral Cartilage — Average Length of the Spine as compared with the Height of the Individual, Relative Proportions of the Trunk and the Lower Extremities, in Dwarfs and Giants, as well as in Short and Tall Individuals—Pyramidal Form of the Spine—Normal Curves of the Spine, Antero-posterior Curves —Mode of Production of Normal Curves—Existence of Lateral Curves as a Normal Condition.

Gentlemen,—In commencing a special course of lectures on the pathology and treatment of that peculiar deformity of the spine, unhappily so common in this and all other civilised countries, and generally described in Surgical works as *lateral curvature of the spine*—a title which very inaccurately expresses the precise direction of the curvature, as I shall presently show you, but which it may be as well to retain, as it has so long, and is still so generally applied to this class of cases—I would briefly state as the reasons which have induced me to select this subject for your consideration,—

1st. The practical importance of the subject, arising from the frequency of this affection, and its very serious results, not only in the production of deformity, but in impairing the general health of the patient, either by causing severe local pain, or by interference with the functions of the thoracic and abdominal viscera.

2nd. The very general neglect of this class of cases by the Surgical authorities of this country, who, from their habits of pathological observation and large clinical experience, would be best qualified to establish the treatment of this affection upon a solid and scientific basis. This neglect may be satisfactorily explained by the fact that cases of deformity of the spine are very seldom, if ever, admitted into any of the General Hospitals of this metropolis. I do not believe that at the present time you would find a single case of lateral curvature of the spine under treatment in any Hospital in London, though there are certainly many hundreds, and probably several thousands, of poor people in this metropolis, principally girls struggling hard for a livelihood, suffering not only from unsightly deformity, but from seriously impaired health, consequent upon such deformity. The essentially chronic nature of the affection, and the great length of time required to effect permanent good by any system of treatment, almost necessarily exclude these cases from the benefit of Hospital accommodation, which we know in this metropolis at the present time is very inadequate to the requirements of the population, even for the treatment of the more acute forms of disease. Hence you will perceive that the great metropolitan Hospitals afford no opportunity of tracing the clinical history of this affection, or practically testing the methods of treatment best adapted to the various stages and varieties of this deformity, which is not only very common among the poor and labouring population, but is of such frequent occurrence in the upper and middle classes of society, that, next to scrofula, it seems to be more dreaded than any other affection.

3rd. I have selected this subject because my connexion during the last nine years with the Royal Orthopædic Hospital, where these cases are treated in large numbers as out-patients, and are also admitted to the beds, has afforded me ample opportunities for clinical observation; and, moreover, because I have been enabled to investigate, by post-mortem examination, the conditions of the spine in several cases of distortion, which I shall take the opportunity of exhibiting to you.

For these reasons then, I have selected the subject of lateral curvature of the spine, and propose to lay before you the results of my investigations and clinical experience; and to explain the principles and details of treatment which I believe will be found best adapted to the different classes of cases, as they will present themselves to you in practice.

Lateral curvature of the spine, in an early stage, appears to be one of the most trivial and insignificant affections which the Surgeon is ever called upon to treat, and too frequently do some Medical men, who have had but little opportunity of watching the progress of such cases, look upon them with indifference, and confidently assure the parents that a slight prominence of the shoulder, or other deviation from perfectly symmetrical form, which they may have observed in their daughter, is no more than exists in ninety-nine girls in a hundred throughout the country, and is of no importance whatever. The error of this opinion, and its serious consequences in some cases, will be hereafter adverted to.

Other Surgeons, however, fully appreciating the importance of such cases, and alive to the possibility of an unfavourable termination, give the same comforting assurances designedly, with the object of preventing their patients falling into the hands of empirics who have always had, and even at the present time continue to monopolise by far the larger portion of the spinal practice of this country; and, provided the Medical men who adopt the latter course keep a watchful eye over these slight cases, and enforce such simple rules and preventive measures as we are all familiar with, I believe they take a wise and prudent course. In a large number of such cases nothing more will be required, but in other instances as soon as the preventive treatment seems likely to fail, and increase of the affection becomes apparent, more specific treatment must be resorted to, because, trivial as slight spinal curvature may appear while as yet unaccompanied by pain, loss of health, or obvious external deformity, it is undoubtedly apt to become a most serious affection leading to unsightly external deformity, and complete destruction of the general health. Much of the importance, indeed, which attaches to cases of spinal curvature in the early stage, arises from the extreme uncertainty which hangs over their future progress. We know that in some cases without any treatment spinal curvature may in an early stage undergo spontaneous arrest, no obvious deformity or interference with the general health resulting; and we are equally assured that in other cases the affection may increase, and produce not only external deformity of the most unsightly appearance, but also very seriously interfere with the general health, either by the production of local pain, or by pressure on the lungs and heart, in consequence of increasing deformity of the chest, so that even life may be shortened.

Nothing can be more uncertain than the natural progress of a case of spinal curvature; and therefore, whilst we are justified by the favourable termination and spontaneous arrest at an early period, to which I have alluded, in allaying the unnecessary alarm and anxiety sometimes evinced by over-anxious parents, it is our bounden duty to watch all such cases with a vigilance which will not allow the slow, insidious, and too often unobserved development of an affection, which having reached a certain point, becomes utterly incurable. I state this forcibly, because I have seen an incalculable amount of mischief result from Surgeons giving the most positive assurances to parents that their daughters were perfectly straight, and they need give themselves no further anxiety as to the existence of spinal curvature, even when the cases exhibited an obvious disposition to pass into confirmed distortion. The diagnosis of these cases—by no means such an easy matter as you may suppose—I shall hereafter describe.

I have already adverted to the absence of any facilities in the Hospitals of this Metropolis for the clinical study of cases of spinal deformity, in consequence of such cases not being admitted as in-door patients in these Institutions, for the reasons already assigned. The result of this deficiency

is, that in the general progress of Medical Science, during the present century, comparatively little advance has been made in our knowledge of the causes, mode of production, and pathological changes in cases of deformity of the spine; and it may certainly be said that lateral curvature of the spine has at the present time no fixed pathology, and, as a necessary consequence, the principles of treatment are equally undetermined. A little consideration of these facts will at once explain to you why cases of lateral curvature of the spine always have been, and still continue to be, treated upon the most opposite and antagonistic principles by the leading members of our Profession. It will be equally obvious to you that a continuance of this state of things necessarily leaves open a very wide field to the pretensions of that class of irregular Practitioners to whom I have before adverted. It cannot but be admitted, however, that the cause of the evil rests with the Medical Profession, and it is equally clear that we have the remedy in our own hands; but so long as the pathology and principles of treatment of lateral curvature of the spine remain undetermined, we must cease to be surprised that the public, who are never slow to discover the defects and uncertainties in Medical practice, should believe—as one of the most able and scientific English authorities on spinal deformity, Mr. John Shaw, has observed—that "these unprincipled Practitioners have secrets for the management of distortions, with which Surgeons are not acquainted," and that the occasional success of the empiric after failure under the direction of an eminent Surgeon, by means diametrically opposite to those previously recommended, should "confirm a parent's suspicion, that the knowledge of the *quack* is superior, in such cases, to that of the Surgeon." (a)

The treatment of spinal deformities, then, having remained chiefly in the hands of irregular Practitioners, who had nothing to guide them but their own observations of the most ordinary phenomena presented by these affections, we find what we might naturally expect, that these men always adopted one leading idea of treatment, which, for the purpose of creating a profitable speciality, each one endeavoured to elaborate into a *system* of his own, contrasting, as strongly as he was able to make it, with the so-called *systems* of his contemporaries, and reputed to be of wonderful and specific agency in the *perfect cure* of spinal deformities.

In this way a variety of these so-called *systems* of treatment for spinal deformities have sprung into existence, and have each in their turn enjoyed the sanction and support of public opinion; as for example:—

1st. The system of *complete recumbency*, by which patients were condemned to constant lying down for several years.

2nd. The system of *muscular exercises, or gymnastics*, employed in a great variety of ways, and upon principles variously modified, according to the opinions and theories of its professors, from the old-fashioned drill-master, and the professed athletic gymnast, with his ladder-climbing, hand-swing, pole-jumping, to the refinements of Kinesipathy and the Swedish system of gymnastics, whose professors pretend to cure deformities, and chronic diseases of all kinds, by movements, according to the method of Ling (b).

3rd. The system of *cutting the spinal muscles*, a method of modern origin, based upon the idea that spinal curvature is produced by the active contraction of some of the spinal muscles, in the same way that club-foot, wry-neck, and various contractions of the limbs, are known to be frequently caused.

4th. The system of *mechanical extension*, employed both in the erect and the recumbent positions, by a variety of means worthy only of being classed with the methods of torture employed by the Inquisition, or at the present time by the Chinese.

5th. The system of *mechanical treatment* by means of spinal instruments, also employed in a variety of ways, and upon very different principles.

A review and historical sketch of these different systems, as applied to the treatment of deformities of the spine, would form a curious and not unprofitable chapter, but here I merely enumerate them as the necessary consequences of the long-continued neglect of this class of cases by our own Profession, and shall take the opportunity of describing them more in detail in another Lecture.

It were, indeed, to be desired that these so-called systems could be spoken of only as things of the past—belonging to the reign of Empiricism in Medicine generally—but, unfortunately, they still exist; and, moreover, the same spirit in which they were conceived appears to exist, and to influence the book-writing and book-advertising portion of those who, from their professional position, claim the right to be considered as authorities in this department of practice. Hence we see a spirit of antagonism still kept up between these different systems, the advocates of each decrying the advantages of the others as loudly as they extol their own; whereas, the truth lies, as I shall hereafter show you, in a judicious combination of the different principles upon which these systems have been founded, or in a limited application of such methods to appropriate cases.

The remedy for this state of things seems now to be dawning through the thick clouds of Professional neglect and popular prejudice, and let us hope that it will be effectual in removing this class of cases from the group which still form the *opprobria* of Medical science. Since the treatment of deformities generally, has been rescued from the hands of the empiric and the mechanician, and has been incorporated with the general practice of Surgery—mainly through the discovery of the subcutaneous method of dividing tendons, by which so many of the severest deformities, such as club-foot, contracted knee, wry-neck, contracted fingers, etc., may be speedily and safely cured—it has been found that the deformities of the body are so numerous and varied in their character and pathological peculiarities; and, moreover, are as yet so imperfectly understood, that it has been thought desirable to group all cases of deformity affecting the limbs, spine, and other parts of the body in a separate class, and to create what is called a specialty, or special branch of Surgery, for the cultivation of which Special Hospitals have been erected in various parts of the Continent, and more recently in this country,(c) in the hope that when these cases are studied on a large scale and by the light which they mutually reflect upon each other, their pathology and treatment may be more readily determined, and as the means employed to rectify such deformities have generally for their object the straightening of deformed limbs, most commonly occurring in children, the art of curing such deformities has been termed Orthopædy, from ὀρθός straight, and παιδός, genitive of παῖς, a child, a word first used by M. Andry, Dean of the Medical Faculty of Paris who, in the year 1741, published at Paris a work in two volumes on "Orthopædy; or, the Art of Preventing and Correcting the Deformities of the Body."

If, then, the public, in consequence of their recognising a great want and deficiency in the existing Medical Institutions of this country—the arrangements of which do not admit of the extension of their benefits to a class of cases of a very chronic description, and requiring special attention and expensive mechanical appliances—have determined to erect and support Orthopædic Hospitals, in which cases of spinal and other deformities shall be treated, it must be admitted that at the same time they impose grave responsibilities upon the Surgeons of such Institutions. The Profession generally, will look to the Surgeons of these Special Hospitals for such an extension of our knowledge as careful investigation and practical experience will necessarily lead to, and they have also a right to demand their assistance in dispelling the fallacies with which special branches of Medical knowledge are invariably surrounded. Our public Professional appointments have their duties and responsibilities beyond the walls of the Institutions in which we labour, and unless we endeavour to make such Institutions schools of instruction, not only to those students who may have the opportunity of attending them, but to the Profession generally, we fail to utilize such Institutions established by the more wealthy portion of the public for the benefit of the poor of the country, and to contribute towards that general advancement of science, which the governors of these Institutions now

(a) "On the Nature and Treatment of the Distortions to which the Spine and the Bones of the Chest are subject." London: 1823. Also, "Further Observation on the Lateral or Serpentine Curvature of the Spine, etc." 1825.

(b) This system will be further alluded to in another Lecture, but for a general and very clever review of several books written on the subject by its Professors, the reader is referred to the *British and Foreign Medico-Chirurgical Review*, Vol. x., 1852, page 31.

(c) The Royal Orthopædic Hospital of London, now situated in Oxford-street, was established as a small institution in Bloomsbury-square in the year 1838, and the number of cases of deformity of all kinds now admitted annually amount to 1600.

recognise as one of their primary objects, and in which we are interested for the sake of suffering humanity, as well as for the honour of our Profession. It is with a deep conviction of these responsibilities that I have ventured to bring the subject of Lateral Curvature of the Spine before you in a special course of lectures at a public school.

The objects and general scope of these lectures will not admit of my passing in review the different opinions as to the nature and treatment of this affection, which have been, and are still, entertained by such members of the Profession who, by writing books on spinal curvatures, lay claim to some special knowledge of the subject. We might, indeed, with some advantage trace the progress of opinion, and it would especially interest us to observe how commonly lateral curvature had been confounded by the older writers with that form of curvature of the spine now well known to depend upon destructive disease of the bones; and also that more recently the opinion has been entertained that it belonged to the class of distortions of the bones known to depend upon that affection which involves the entire osseous system—viz., rickets. Hence the belief that in such cases girls subject to this affection suffer distortion of the pelvis, and are likely to die in childbirth should such an event occur. In evidence of the latter opinion still lingering in the public mind, I may mention that I have frequently been appealed to by parents as to the probable effects of marriage, and whether, under the circumstances of existing spinal curvature, matrimonial engagements ought or ought not to be sanctioned. I shall, in its proper place, refer to the broad lines of distinction which separate in their pathology the cases of lateral curvature of the spine, from the cases of spinal disease which produce the posterior curvature, and also the cases of rickets in which lateral curvature may form a part of the general deformity of the body, and in which the pelvis really does undergo serious distortion likely to interfere with child-bearing. Time will not, however, permit me to do more than make a passing allusion to the erroneous doctrines either of the past or present day.

My great object in these lectures will be to endeavour to elucidate the general pathology of lateral curvature of the spine, and in so doing establish the principles of treatment upon a rational and scientific basis. In this attempt I shall especially bring before your notice certain views which a careful study of the anatomical construction of the spinal column and its physiology, especially in reference to the mechanism of motion, have induced me to adopt. I shall also refer you to several dissections and post-mortem examinations which I have had the opportunity of making in cases of deformity of the spine, and the specimens from which I shall take the opportunity of exhibiting to you.

I shall be enabled to demonstrate that lateral curvature of the spine may not only be produced by a variety of local causes, but that at the different periods of life at which it occurs is associated with such various constitutional conditions, that, instead of there being any one method or system of treatment applicable to all cases, as the advocates of each of these different systems to which I have adverted would have you believe, all the resources of Medical and mechanical science are required either to cure or arrest the progress of this affection.

It will also be my especial object to keep the more practical portion of our subject in view, and to describe the details of treatment applicable to the different classes of cases which will present themselves to you in practice. I do not propose to bring before you any new and startling idea of treatment, any description of a wonderful instrument capable of *curing* spinal distortion, however severe, upon some new principle; but I do hope to be able to convey such an amount of practical information as will enable you to treat these cases with greater success than they generally meet with at the present time, and to offer some suggestive reflections on the pathology of the subject, which may hereafter lead to its more complete elucidation and the establishment of this branch of Surgical practice on more definite principles and a more scientific basis than it has hitherto rested.

Now, gentlemen, before proceeding to the consideration of the morbid conditions of the spine in the deformities I am about to describe, let me first direct your attention to a few points in the anatomical construction and mechanism of the spinal column in a state of health.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON THE CLOSURE OF CLEFTS IN THE HARD PALATE BY OPERATION.

By J. W. HULKE, F.R.C.S.

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In a letter from Berlin, published in the *Medical Times and Gazette*, July 20, on "Uranoplastics," it is stated that Professor Langenbeck had exhibited, at a meeting of the Medical Society, "a boy in whom he had effected a cure of congenital total cleft of the hard and soft palate by a new operative proceeding;" and the correspondent adds, "A complete closing of this malformation has probably never yet been attained before."

This "new proceeding" has long been very successfully practised by English Surgeons, more particularly by my colleague Mr. Fergusson, and by Mr. G. Pollock, whose valuable contribution to the surgical treatment of this malformation was published in the *Medical Chirurgical Transactions* a few years since.

The following case, treated by me in 1859, though not completely successful, was sufficiently so to show that, had the patient submitted to another operation, complete union would have been obtained:—

Total Congenital Cleft of the Hard and Soft Palates.—Richard B., aged 40, an artisan, was admitted into King's College Hospital on September 12, 1859, with cleft palate. A corresponding fissure in the upper lip had been closed by an operation in childhood. The soft and hard palate were both split. The cleft in the hard palate encroached rather more on the left than on the right of the middle line. It was about half-an-inch across at its widest, and narrowed anteriorly till opposite the first bicuspid tooth, from which point it ran outwards as a linear fissure, through the alveolus, between the right lateral incisor and canine teeth. The roof of the mouth was lofty, and its sides were inclined towards each other at an acute angle. The vomer was deficient. The mucous membrane of the pharynx had the usual dry appearance; the trumpet mouths of the Eustachian tubes were conspicuous. The voice was very weak, and scarcely intelligible. After the sensitiveness of the fauces had been blunted by tickling them for a few days with a feather,

On September 17 I closed the gap in the soft palate by Mr. Fergusson's method of operating, putting in five silver stitches. Two of these were removed on the 21st, and the other three on the 24th, when the whole length of the wound had united.

October 1.—He went into the country; his voice was but slightly improved.

December 29.—Returned to the Hospital. His articulation was more distinct, and voice so much stronger that he could join in the singing in the chapel.

January 7.—I incised the edge of the cleft in the hard palate with a small Fergusson's knife; and then working in the cut with a stronger Pollock's knife, detached the mucous membrane and periosteum on each side, as far as the alveolar process, working from the front backwards, in order to cut the larger branches of the posterior palatine artery last. The flaps of mucous membrane and periosteum obtained in this way fell together in the middle line without any dragging, their edges even slightly overlapped. Three silver stitches were used; the posterior cut out on the third day (owing to the darkness of the afternoon I was not satisfied I had put it in accurately); the anterior was removed on the fourteenth, and the middle one on the sixteenth day, at which time the wound had united everywhere excepting at the junction of the hard and soft palates, where there was still a small hole corresponding to the posterior stitch, of the diameter of a small cedar pencil. This I intended to close after an interval of a few weeks, and I believe there would have been no difficulty in doing it; but the patient, who had returned to his employment in Yorkshire, could not get leave of absence. He wrote to tell me of the great improvement in his voice, and to express his gratitude.

The separation of the mucous membrane with the perios-

teum of the hard palate from the bone, is always attended with free bleeding, but though so many vessels are necessarily divided, yet the flaps are amply nourished through the continuity of their attached borders with the gum. It is probable that the flaps do not perish from want of blood, but that their gangrene, which has deterred so many Surgeons from prosecuting further attempts to close clefts in the hard palate, is favoured, by the use of blunt levers and raspatories, by which the tissues are bruised and injured much more than when they are more cleanly cut away with a sharp knife, the edge of which is kept against the bone; by the dragging of the flaps by the stitches when they have been insufficiently separated from the bone; and by the restriction of the patient to a very low and insufficient diet, as is too generally enforced, instead of a liberal supply of nourishment after the operation. The free supply of blood which the denuded bone receives from the periosteum clothing its upper surface, prevents its necrosis.

Total clefts of the hard palate running out through the alveolar process anteriorly, are more favourable for operative treatment than lesser clefts involving the posterior part of the hard palate only; because in total cleft, the roof of the mouth is lofty, and larger flaps can be gained than in partial, posterior cleft, where the palatine arch approaches more closely the natural curve.

10, Old Burlington-street.

CASE OF FRACTURE OF THE SKULL FROM A ROCKET.

By FREDERICK NEEDHAM, M.R.C.S.
Medical Superintendent of the York Lunatic Asylum.

On June 14 the annual exhibition of the Yorkshire Gala took place in a field in the neighbourhood of the York Lunatic Asylum, and during the display of fireworks in the evening a very serious accident occurred to a young child named Thomas Coupland, aged 7 years, by the unexpected discharge of a large sky-rocket.

It appears that the person who had the care of and exhibited the fireworks, had brought on to a stage, which was erected in the centre of the field, several large sky-rockets—one of which he raised upon a stand and another he laid upon the platform. He then proceeded to ignite the former which shot into the air, casting, as it exploded, a spark which, alighting on the latter, caused it also to be discharged, and to fly with tremendous force in a horizontal direction at about the height of a yard from the ground, and lodge itself in the forehead of the little lad who was standing at the distance of about thirty yards from the place where the firework exploded. He was immediately brought into the Asylum—close by—and I saw him—and found the following to be his condition:—

He was quite insensible, pale, and with a feeble pulse of 140. There was a large, ugly-looking wound in the forehead, from which a mass protruded to the extent of nearly two inches, on examination seen to consist of brain-substance, and from around this very considerable hæmorrhage was taking place.

I refrained from making any more minute examination, as the hæmorrhage was so considerable on the slightest movement as to endanger life at once.

I directed him to be left undisturbed and to have no stimulant given to him unless sinking seemed to impend, lest the bleeding should be increased and continue.

Two hours after I found him but little changed; reaction was taking place and the bleeding still continued, but not to such an extent as before.

I saw him again in the morning, with my friend Mr. Matterson and other Medical men interested in the case, when the bleeding had altogether ceased and coagulation taken place over the bleeding surface. A small quantity of wine was now administered, together with arrowroot and beef-tea, which the child took eagerly. There was still no apparent consciousness, although his friends said he had spoken once or twice in monosyllables during the night. The pulse was still as quick as before, and the pupils were dilated widely.

More protrusion of brain had taken place and about half-an-ounce of disorganised cerebral matter which had fallen on to his face, had been wiped away by his friends. There was considerable jactitation and convulsive movement of the facial and other muscles, the breathing was quick and feeble.

He continued in this state until the following morning, when he gradually sank, and died twenty-nine hours from the time of the accident.

I could obtain no regular post-mortem, but was allowed to examine the wound with my finger, I found that the rocket had fractured the frontal bone in the centre, forcing before it part of the bone itself, and producing an opening surrounded by splintered edges nearly two inches in diameter. There was a distinct channel for more than two and a-half inches in the brain-substance, at the bottom of which was a fragment of bone about three-quarters of an inch square. There was no other foreign body to be felt, and I had no opportunity for further examination.

York.

ON THE NARROW LIMITS OF SO-CALLED RATIONAL MEDICINE.

By J. STEVENSON BUSHNAN, M.D.
Fellow of the Royal College of Physicians of Edinburgh, etc., etc.

To call in question the soundness of the advice offered by those who, in any kind of human undertaking, counsel us to act upon rational principles, may seem a bold proceeding. And bold it would be, were the rational principles suggested fixed in their character, and the occasions proposed for their use so determinate that the results might be with certainty foreseen. But the slightest reflection must make it appear that there are principles—rational in the strictest sense of the term—which are not absolute, but true only within a narrow range; and that there are occasions, the entire character of which is but dimly seen, and where, therefore, if it be assumed that a principle of this kind is applicable to such a case, the principle is rational only in name and appearance; so that the machinery employed, while plausable to a superficial glance, is really capable of affording the most ambiguous and unlooked for results. Every man, no doubt, is ready to repudiate the idea that in any case, in which he recommends rational principles, his proposal is to extend a principle beyond its proper range, or to make use of it in a case, the nature of which is not well defined. But a charge is not disproved because it is disclaimed. Is there nothing in the daily experience of the world to demonstrate that in all the practical arts to which men are addicted there are many persons who, to their own ruin and the ruin of others, proceed too largely upon theoretic principles? What is the cause of this too-frequently observed failure, but that they extend principles beyond their legitimate limits, or strive to bend these to cases not sufficiently fathomed or seen to be unsuitable. Let no one suppose that I am here referring to merely frivolous minds—to such as mimic the mental acts of the intelligent, as children do movements employed in the mechanical arts. Men of no small powers of mind, times without number fall into the error of applying limited principles to cases, the nature of which is but imperfectly determined, with such results as might be anticipated. In short, every ingenious theorist—and how fertile is every busy scene of life in such theorists,—every ingenious theorist, I say, who wastes his life and talents in striving to elicit by his theory (which, unless he be altogether a fool, necessarily contains some truth or principle) a mode of producing some hitherto unaccomplished effect, boasts that he is directing the pursuit in which he has engaged by rational principles. If there be any truth in these observations, how incumbent upon us is the precaution to examine well the extent of available principles and the amount of precision or definition in the occasions on which we are called upon to act, when the advice is tendered to us to proceed on rational principles.

What I have just said bears on nearly all the pursuits in which men engage; or, if there be any exception, it is only in the case of those which are purely mathematical; for even to physics, in which the properties of matter are mingled with those of space and number, these observations are not altogether inapplicable. They find their chief illustration, however, in those departments of human acquirement in which the rules or principles are less absolute, but admit only

of the three degrees of confidence, known as possibility, probability, and moral certainty. There are many arts dependent on sciences, the principles of which fall under the three heads of evidence just referred to; and thus the rules of procedure in such arts claim no more than the corresponding degree of confidence. There is, moreover, a distinction of the arts into constructive and directive, which materially modifies the degree of certainty with which the rules or principles in each kind can bring forth an intended result.

"Some arts are constructive; others may be described as directive. In the constructive arts, the materials await the orders of the master-workman; so that, at his pleasure, the progress of the design may be stopped till some error is corrected, or some new facility given to the operations in hand. In the directive arts, the overseer is denied this advantage. He is concerned with a force or forces which have an onward course—which he cannot put on or shut off at his pleasure."—*Edinburgh Med. Journal*, 1857.

From the many subjects upon which these generalities bear, I am about to single out one, which I have no doubt you have already conjectured to be Medicine.

Not to beg the question which I am about to discuss at greater length—namely, the narrow limits of scientific or rational Medicine, I will only premise that Medicine as a science, beyond all question, stands among those subjects of knowledge, the evidence of the principles of which is not demonstrative, but only possible, probable, or morally certain. Moreover, Medicine, as an art, is not a constructive but a directive art—that is, an art in which an onward force is concerned which cannot be shut off at pleasure, and while a gauge is taken of the effects produced in the case by the proceedings already resorted to.

But from such generalities let us proceed to examine more closely what Medicine is both as a science and an art. To avoid embarrassment, let us confine our attention for the present to the one principal end of Medicine, namely, the cure of a disease in an individual patient. From which of the numerous branches of knowledge subservient to Medicine are we to draw the rules or principles and means or remedial agents by which the cure is to be set on foot? Not from anatomy, not from physiology, not from pathology, but from therapeutics, or that part of knowledge which teaches the operation of remedial agents on the living system, and their effect in the subjugation of diseases. Therapeutics, in so far as it is a science, consists of certain principles—generalizations from facts—that is, from facts observed as to the effects of certain means or substances on the living body in health and disease. If, then, it be from therapeutics that we derive all the rules and means of curing diseases, the science of therapeutics must be the true science of Medicine—all the other branches of Medicine being but subsidiary. To this proposition some may feel inclined to object; nevertheless, any doubt upon the point cannot for a moment be maintained. The certainty of curing a disease, after that disease has been ascertained is in proportion as it depends upon some acknowledged rule or principle in the science of therapeutics. Upon what else can the certainty of curing a disease depend? And if that be admitted, can anything else be called Rational Medicine, but the certainty of curing a disease by some acknowledged principle or rule of therapeutics? Surely, then, if the cure of diseases be in any respect reducible to a science, that science must be identical with the science of therapeutics.

If, then, therapeutics be the true science of Medicine, how does it happen that so little pains is in our time bestowed upon the cultivation of this department? How does it happen that even those who are continually crying up Medicine as a science, and dealing contempt upon those who contend that experience is the securest ground for its improvement, neglect therapeutics, and allow themselves to be wholly engrossed by pathological studies? There may be many reasons why this state of things prevails; but probably the most influential cause is the extreme difficulty of carrying therapeutic inquiry beyond the condition in which it actually is.

The grounds of this difficulty it is not hard to discover. We have but to look at the kind of task which Medicine sets itself in undertaking the cure of disease. To cure a disease is to bring an individual frame of organism under such circumstances as shall favour its return from the state of deviation which has taken place to its original integrity of vital action. The principles or rules by which this endeavour is made can, to a very small extent only, be drawn from the individual frame of organism, the rectification of some action or actions of which is the object set before the Physician at the moment. The principles or rules by which almost exclusively he is to be guided are general principles or rules drawn from the human species at large, and therefore certainly not applicable in the whole of their extent, to the individual organism which is the present object of his attention. It is one of the elements of his practical skill—that skill which he has acquired by long converse with diseases, and a personal experience of the many peculiarities incident to individuals—to be able to seize on the modifications required to be put upon general rules in order to adapt them to the nice gradations of susceptibility to be found in each particular member of the human race.

Every principle or rule of Medical science, therefore, however exact its foundations, is limited in its use or application by the peculiarities which so undeniably abound in individual organisms.

It is not, indeed, to be denied that there are rules, or limited principles, for determining the presence of some of the peculiarities in individual patients, such as require the modification of the general precepts which may, at first sight, seem to be applicable to the case. It may be conceded, for example, that the kind of assistance which the practical Physician obtains in the choice of his remedies, from what is laid down in theoretical works respecting the several circumstances of age, sex, temperament, constitution, and previous diseases, belongs to Rational Medicine. But with respect to the highly important point of idiosyncrasy, what can Rational Medicine teach him? It may, indeed, recount what idiosyncrasies have been recorded in past times; but what but his own experience can inform him of the exact idiosyncrasies which belong to the patient who at the moment is under his care?

The so-called principles of Medicine, when they do not rest on possibility or probability, have, at the utmost, the force of moral certainty. Such principles are applicable to an art, which, being not constructive but directive, does not admit any retracing of steps or successive trials of effect. Whatever is already done is beyond recall. How little room, then, is there for the rational in the application of such rules! It may well be doubted if the generalities of Medicine be at all entitled to the name of principles. If that name be conceded to them, they are principles which of all known principles come the least up to the just idea of principles.

When a principle is perfect, any one of all the facts falling under it may be deduced from it, altogether independently of the further evidence of experiment. For example, from the principle that the same amount of matter at the same distance from the earth's centre has always the same gravity, how many thousand facts are deducible which, without any new evidence, have the force of demonstration. If a metal, heated in a given quantity of atmospheric air, acquires weight, it is known, beyond doubt, without any further trial, that the weight which the metal acquires is exactly the same as that lost by the atmospheric air. If a given quantity of sulphate of baryta be heated with charcoal, the weight of carbonic acid produced indicates at once how much oxygen the sulphate of baryta has lost, or gives the proof that the sulphate is thus changed, not into a sulphuret of baryta, but into a sulphuret of barium. If a given measure of water absorb a gaseous body—say ammonia—and the same measure of the new compound is found to weigh less than that measure of water, it is demonstrated, without further proof, that the water has expanded in the operation. And it would be easy to multiply examples of principles of this degree of certainty in physical nature; but when we turn to the so-called principles concerned in any part of the treatment of diseases, there is absolutely nothing of such a kind to be met with. Even rules in which number or quantity is concerned, occasionally fail us. In dropsy of the abdomen a cord is sometimes employed to measure the girth of the trunk of the body at a certain height on two successive days; and if the girth be less on the second day than on the first, it is probable that the disease has decreased. Yet even this is not beyond doubt; for the change may not have arisen from a decline of the water in the cavity, but from a diminished distention of the bowels by flatulence. Again, in dropsy the urinary secretion may have considerably augmented under the

use of diuretics. This is a probable sign of the disease having diminished,—yet it is not certain; for unless many physiological experiments are fallacious, the increase of the urine may not be due to absorption from the cavity affected by dropsy, but to the absorption of fluid from the atmosphere by the skin, or by some other channel.

It may be urged on the behalf of the claim of Medicine to be essentially rational, or a true science that hardly anything can have more of the character of a principle than the effect of certain substances to cause vomiting, certain other substances to cause purging, certain other substances to act as diuretics, certain other substances to cause sweating, and so forth. It is not to be denied that the known effect of such substances to act with much certainty in these several respective modes, constitutes a most important series of principles. But these principles are but remotely concerned in the great object of Medicine which is not merely to cause vomiting, or purging, or sweating, but to cure diseases. For it unfortunately happens that when such more immediate principles are laid down as that emetics cure such and such diseases, purgatives such and such other diseases, and sudorifics various additional diseases, the rule or precept is found to go but a very short way, and, under every variety of circumstances, to prove an entire failure. Not that it is here denied that such principles sometimes turn out to be well founded; for it is to be remembered that what is here contended for is not that Medicine is not in some degree rational, but that it is rational only to a very small extent.

Of the departments of human knowledge which run parallel with Medicine, agriculture is one, between which and Medicine there exist very decided analogies. Nevertheless, the history of the cultivation of each of these two branches of knowledge is found to exhibit a remarkable contrast to the history of the other. Medicine has been from its very earliest foundation prosecuted on so-esteemed rational principles; while, till quite recently, agriculture has rested almost exclusively on foundations of experience. Nevertheless, it is probably true at this moment that agriculture has attained a more truly scientific position than Medicine. In short, it seems no longer a subject for doubt that the agriculturist may act to a far larger extent on rational grounds in the operations necessary for rearing his crops, than the Physician can do in the measures he takes for the cure of diseases. Let it not be imagined that there is any idea involved in this statement of agriculture being superior to Medicine,—two things are in particular to be borne in mind relative thereto, namely, that agriculture has borrowed very much from sciences, owing their advancement to their subserviency to Medicine; and that agriculture is not required to deal with the preservation of every individual of the crop which has come into existence, but only to take care that an average number of the individual plants shall be brought to a healthy maturity. In short, that agriculture corresponds rather to public hygiene than to the practice of Medicine.

In agriculture there is one great scientific principle from which its several rules are deducible under the guidance of experience; namely, that there is a strict identity between the peculiar chemical composition of the crop, and the peculiar chemical composition of a soil which affords such a crop in abundance. To preserve this strict identity of chemical composition between the soil and the crop, which it is the object of the agriculturist to raise in abundance, is the foundation of his rules,—if there be a failure in this strict identity of composition, there will be a failure of the crop.

Is anything analogous to this great principle in agriculture to be discovered in Medicine? There is one analogous principle which, by being diligently prosecuted, may be destined to render Medicine in a far higher degree rational than it has ever attained to in its past history. That principle is the strict identity between the chemical constitution of the food and the chemical constitution of the organism of the living frame. It appears to be a necessary corollary from the acknowledged principle that a deviation from health is a deviation in some part of the organism from its just chemical constitution. Thus that health in each living individual consists in a complete conformity of all the constituent textures and fluids to the due standard of chemical composition; and when a deviation from this standard has occurred, that the restoration of the parts in fault to their chemical integrity is to cure disease. Thus, according to this view, all remedial agents are subservient to the appropriate direction of dietetic means. There can be little room for doubt that Medicine is hereafter to be cultivated in conformity with this principle. But it by no means appears from anything hitherto ascertained how far even the successful application of such a principle is capable of rendering the ordinary practice of Medicine to a very large extent rational.

Let no one suppose because it is here contended that Rational Medicine has in our time very narrow limits, that the unspeakable benefits which would result from Medicine being rendered rational to a great extent is denied. Nothing is more earnestly to be desired than that Medicine should be made rational to the fullest extent that is conceivable. But nothing can be more mischievous than to believe that the practice of Medicine can be conducted on rational principles (while in the nature of things that is impossible) merely because it is heartily to be wished for that Medicine should reach such scientific precision.

Still less let any one imagine, that while it is here insisted upon that the practice of Medicine is governed in by far the largest measure by experience, it is to be understood that to make a skilful Physician nothing more is necessary than that he should be a practical man familiar with sick chambers. A Physician must be trained in science, although it is not by science principally that he is to treat diseases. And in what is now about to be said, it may appear that in most of the disputes carried on by Medical men as to the respective merits of science and experience in Medicine there is really no difference of opinion—inasmuch as each party is apt to look at the question in debate from a different point of view. For there are, in truth, but few in the Profession who really act on the assumption that Medicine—meaning by Medicine the treatment of diseases—is for the most part rational. Nevertheless, there are some,—and most dangerous instructors they are when they obtain the confidence of the young and inexperienced.

But let us turn our attention for a moment to the circumstances which lead so many members of the Medical Profession, without having imbibed radically erroneous views, to insist that Medicine is essentially rational and scientific. And, first of all, what was said before must be here repeated—namely, that the science of Medicine, in so far as it is a science, or is hereafter to become a science, is the science of therapeutics—and not anatomy, physiology, pathology, or chemistry; that is, that the immediate object of Medicine is to cure diseases; and therefore Medicine is a science, or is rational just in proportion as it affords rules or principles from which a certain method may be deduced of removing any deviation which may have been discovered to have taken place in the living system, from the integrity of health. And it plainly is because this immediate object of Medicine is not kept steadily in view, and because the mind naturally runs away with the undoubted fact that several true sciences are subservient to Medicine, that Medicine proper, or the cure of diseases, is rashly pronounced to be in a high degree scientific. The true state of the case manifestly is, that many most important sciences are subservient to Medicine; but that hitherto Medicine proper, as a science, lies within very narrow limits.

In the old language of the Schools, the theory or science of Medicine consists of physiology, pathology, and therapeutics. We shall be told, perhaps, that the practice of Medicine includes the diagnosis and prognosis of diseases; and that, since physiology and pathology—two unquestionable sciences—are subservient to diagnosis and prognosis, the practice of Medicine is, therefore, a department of science. There is no other objection to this mode of viewing the subject, except that, while it has no practical tendency, it serves to perpetuate the confusion which hangs over the subject, and prevents the mind from reaching at once the only important question at issue; namely, the extent to which principle is applicable to the immediate removal of a disease.

But, while Medicine proper is but to a small degree scientific, the Physician must not be in a small degree only a man of science.

Physiology, in its full extent, is the science of living Nature in health and disease. Physiology is the Physician's science. It is the progress of physiology which has brought Medicine to its present state of advancement. If it be said that there are many good Practitioners who are not good physiologists, the answer is, that these men have picked up by tact, at second-

hand, what the great masters in the science of Medicine discovered through their acquaintance with living Nature. The great use of the knowledge of physiology—of the acquaintance with the order and the course of living nature—is to render experience available to the improvement of Medical practice.

Children, savages, and men, wholly uneducated people, have usually a surprising turn for minute observation, as to the peculiarities of the individual things brought by chance under their notice. This natural kind of minute observation was doubtless of the greatest utility in the very earliest stages of Medicine. And what is called the education of the senses should not be neglected in any one who is designed for the Medical Profession. But this is not the kind of experience which is most needed for the advancement of true Medical knowledge. When the use of some substance or method during the presence of a disease is followed by the cure of the disease, the true Medical observer is the person who pronounces the truth, namely, whether the disease has ceased because that substance or that method was used, or that it would have ceased whether that substance, or that method had been used or not.

There can be no doubt of the extreme prevalence among men, educated and uneducated, to ascribe any event which strikes their senses for the first time to the most prominent event or circumstance as its cause which preceded that event. Let the metaphysician determine whether this tendency be an original part of man's mental constitution or something superadded according to a certain law. The existence of this strong tendency among men is all that concerns us at present. This strong tendency is manifestly the foundation of the practice of Medicine. But, unfortunately, it is not only the foundation of the practice of Medicine, and of the useful arts in general, but it is also the foundation of all that is most absurd in the history of human beliefs—of divination, astrology, sorcery, witchcraft, as well as of the absurd remedies to be found in the ancient catalogues of the Materia Medica. It would seem that every intelligent person has an intuitive tendency to connect any two events in immediate proximity of succession as cause and effect unless he previously knows the contrary, or unless he has seen reason to conclude from previous knowledge that the cause of the occurrence presented to him belongs to some different order of casual agencies. Hence the use of education at once appears in the determination of the connexion of cause and effect in cases of the complex character which belong to the practice of Medicine. The more a man knows of the intimate character of physiological nature, the less likely is he to be imposed upon by the fortuitous concurrence of two events having no real link such as that of cause and effect between them. Thus many sciences are usefully subservient to the education of the Physician. It cannot be said that a man's natural sagacity, independently of education, will prevent his running into errors of this kind; or if he run into such inadvertently, will prevent him from continuing in them. That argument is indeed true as respects many naturally sagacious people in the humbler arts; but it can have no place in Medicine, at least as a general rule. When the inference which a man has made refers to phenomena falling frequently under his notice, he quickly obtains the means of rectifying the errors in which the determined bias of his mind to regard phenomena as existing in the relation of cause and effect unceasingly leads him. But when the phenomena concerned are of a rarer occurrence, complex, or seldom arising under exactly the same form, like the major part of the phenomena in the practice of Medicine, then the course of error begins. Under such circumstances the uninstructed mind, however sagacious, has no guard against error. It falls a willing prey to its inherent tendency to interpose this relation between successive phenomena.

Thus our conclusion is, that, while Medicine rests wholly on experience, the Physician is incapable of benefiting by experience until he has become largely conversant with the subservient sciences.

FORMULÆ FOR CREOSOTE.—1. *Creosoted water*, according to M. Lebert's formula, is best made with 1 to 4 parts of creosote to 1000 of water. It is used in lotions for burns, and putrid or cancerous ulcers. 2. *Creosoted Glycerine.*—Glycerine 125 parts, creosote 12 parts. For dressing wounds and ulcers, applied on lint.—*Journal de Chim. Méd.*, August, p. 528.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY

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HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

PARAPLEGIA FROM SPINAL MENINGITIS (TWO ATTACKS)—RECOVERY.

(Under the care of Dr. RAMSKILL.)

[Reported by Mr. SMITH, House-Surgeon.]

James D., aged 21, upholsterer, a delicate-looking man, admitted an in-patient into the Hospital, in December, 1860, under the care of Dr. Ramskill. In January, 1860, he had been feeling "queer" and ill, with a sensation "like a tightness" round the body, aggravated by walking and exertion of all kinds. This continued for about two months, when suddenly one day, whilst sleeping after dinner, he was awakened by violent pain in the back, and the sensation of tightness so bad round the body (about the seventh or eighth dorsal vertebræ) that "he could not breathe nor move," being unable to take off his clothes. For three days he continued in this condition; the pain and tightness being constant, prevented his getting to sleep. There was no paralysis, but he could not move his limbs, as the very slightest movement caused intense aggravation of the pain. He was very feverish during this attack. After the third day he could be undressed, the pain having to a certain extent abated.

About six months passed on in this way, when he applied for admission into the London Hospital. He remained for twelve weeks an in-patient, under the care of Dr. Ramskill, getting slowly better, and was at length discharged quite well.

In December he was brought to this Hospital. He had been into the country in order that he might get fresh air, but there he contrived "to catch cold," bringing back all his old symptoms with renewed intensity.

When admitted he was unable to stand straight, and hobbled along with a sliding motion, and that with great difficulty and pain. He had a great deal of pain in the spine, especially aggravated by pressure between the scapulæ. He was feverish, but his general health did not seem to suffer much. He was not subject to gout nor rheumatism, but he had had rheumatic fever eleven years before. None of his family were the subjects of paralysis.

Dr. Ramskill prescribed a pill containing one-eighth of a grain of the extract of belladonna, two grains of powdered ergot of rye; and a draught containing five grains of iodide of potassium three times a-day. Dry cupping to the spine was also practised. On January 5 a blister was applied to the spine, and again in February. On February 12 he was ordered for a fortnight bichloride of mercury, one-twelfth of a grain three times a-day, after which he again resumed the iodide. A seton was inserted about the level of the fifth and sixth dorsal vertebræ. On March 15, in addition to the iodide, cod-liver oil was ordered. On the 21st, half-a-drachm of the solution of bichloride of mercury and three grains of the iodide of potassium were given; and on April 12 another seton was inserted.

Under the above treatment he gradually improved, and was discharged well on May 10.

PARAPLEGIA FROM SPINAL (RHEUMATIC) CONGESTION AND EFFUSION.

(Under the care of Dr. RAMSKILL.)

Thomas B., aged 40, was admitted on February 1. He was a draper, accustomed to stand all day in his business; has suffered severely from rheumatism for many years, and had rheumatic fever at the age of 15. His parents lived to old

age. No tendency to hereditary disease could be traced in the family. He states that sixteen months ago, he had had a long business day, and came home on the top of an omnibus, sitting on a wet cushion. Arrived home, he sat down, and had violent pains in the region of the sacrum and coccyx. He shivered and could not stand upright, and was led, and partially carried, up to bed. He continued ill, with feverish symptoms and acute pain in the back and lower limbs for six weeks, at the end of which time it was found that both lower limbs were entirely anæsthetic and paralysed as to motion, perhaps the left was most so. He did not feel pinching, however hard. He was salivated, and afterwards he took strychnia, and was often galvanised.

He is a tall, dark man, very thin, has lost much flesh since the attack. On examination we find that he can walk but slowly with the aid of two sticks, but it is not the "myelitic walk." He knows when his feet are on the ground, and can plant them correctly. He knows also where they are when in bed; walking makes him worse. He can walk best early in the day, and is soon exhausted. He has the sensation of "pins and needles" in the left leg when it gets cold, never in the right. He has spasms day and night in both limbs, more rarely in the left. Sitting before a fire will bring on the spasms. He has no formication nor hyperæsthesia. There is no sense of a cord or tightness round the waist. Tactile sense in legs is not good, and both limbs are alike in this respect. He is most sensible to pricking or pinching in the left. He has every day for some hours great pain in the lower part of the back. It is worse on change of weather. The pain is aggravated, and extends down the thighs on the slightest motion. There is no pain excited in the back by pressure. The lower extremities are wasted, but not more so than the body generally. Complains of great weakness in the loins. The bladder and rectum are affected to this extent, that he has to run quickly when the desire to void either occurs. The urine is highly acid. His general health had not materially suffered. There was no evidence of former cardiac affection.

On his admission, February 1, Dr. Ramskill prescribed the following draught, to be taken three times daily:—
℞ Tincturæ acteæ ʒss., potassii iodidi gr. v., potassæ bicarbonatis ʒj., tincturæ rhei ʒj., decoct. cinchonæ ʒj., and also a pill containing extract of colocynth and blue pill to be taken occasionally. A belladonna plaister was applied to the loins.

On the 19th he reported himself as generally better, and feeling much stronger in the loins.

March 1.—Progressing slowly.

5th.—Decided improvement. He can walk without a stick. He rarely has spasms, and rarely pains in the back. The functions of the rectum are more stable, but his bladder is still irritable.

April 5.—Improving, and the bladder is now stronger. He can retain the urine when having a strong desire to pass it. The left foot is worse, and he observes that if he smokes a pipe, or, when standing, takes up anything to drink, his left leg trembles, and the left foot feels numb.

May 12.—Has little or no complaint to make, he is not as strong on the legs as he should like to be, but beyond weakness there is nothing to complain about.

Remarks.—Dr. Ramskill remarked that both these cases were examples of a comparatively frequent affection: one, the first, being attended with comparatively little, the second with much, effusion. Inflammatory thickening of the membranes about the exit of the spinal nerves, he said, caused the principal symptoms in the first case, and meningitis and congestion of the cord, with rapid effusion of spinal fluid, those of the second. In both, the chief symptoms of myelitis were wanting; so were also those characteristic of reflex paraplegia. There were several points of great interest in these cases which it would be most profitable to compare with some other cases of myelitis to be recorded.

KING'S COLLEGE HOSPITAL.

EXCISION OF THE KNEE-JOINT—RECOVERY.

(Under the care of Mr. FERGUSSON.)

For the particulars of the following case we are indebted to Mr. Matthews and Mr. Forteseue:—

C. W., aged 18, admitted into King's College Hospital, under the care of Mr. Fergusson, on April 1, 1861.

He states that when 4 years of age, a girl who was carrying him, let him fall from her arms to the ground, he struck his right knee, which soon after became much swelled and very painful. He applied for relief at a London Hospital, and was admitted an in-patient. Here he remained for some considerable time, and was at length discharged cured, the knee being much contracted. He went about to various Hospitals, but nothing was done for the deformity. He applied at King's College Hospital in August, 1858, when the knee was so contracted that the leg was at a right angle with the thigh, there were three or four cicatrices around the joint, where abscesses had been opened. The leg was considerably straightened by means of an extension splint and the boy discharged at the end of the month.

On admission, in 1861, he was pale and unhealthy-looking. The leg was so bent on the thigh that on standing upright he did not touch the ground by pointing the toes down. The knee was anchylosed, there being hardly any movement perceptible. The tibia, which was considerably rotated outwards, was partially dislocated backwards. The muscles of the thigh and leg were very much wasted. He walked with a crutch, against which the contracted limb hung useless.

April 7.—The boy having had chloroform administered, Mr. Fergusson performed resection of the joint. Making a single transverse incision, and dissecting the tissues up and down, he sawed through the condyles of the femur, and the upper end of the tibia, and thus removed the joint in a single wedge-shaped mass. The limb was placed upon an ordinary excision-splint and the boy removed to bed.

11th.—The sutures were removed. Wound partially healed by first intention. There has been no appreciable constitutional disturbance.

12th.—Splint removed and re-applied. The tendency to rotation outwards of the femur was counteracted by broad strips of plaster applied round the leg and splint in an opposite direction.

29th.—The wound has now quite healed, the union has been daily getting firmer. The excision-splint was to-day removed, and one of plaster of Paris applied from the upper part of the thigh nearly down to the ankle.

May 1.—(Three weeks after the operation.) The boy is up and about the ward on his crutches.

24th.—He was discharged. The limb was now supported by a gutta-percha splint, the patient having pulled off his plaster casing on his own authority.

June 5.—He was re-admitted to gain strength in the Hospital. The knee was still weak, and showed some tendency to bow outwards. A leather case was put on.

August 14.—He was discharged after about a fortnight's stay. The limb was then quite firm, the position good, and the muscles of the calf well-developed. He shows himself frequently at the Hospital; the shortening of the limb is inconsiderable. He can walk well without crutches, but still uses them, apparently from the fear of getting his leg out of the perpendicular.

YORK COUNTY HOSPITAL.

LARGE ABSCESS IN THE RIGHT LOIN OPENING INTO THE RIGHT LUNG—EXPECTORATION OF LARGE QUANTITIES OF PURULENT MATTER—SUBSEQUENT EXTERNAL EVACUATION—DEATH—AUTOPSY.

(Under the care of Dr. SHANN.)

E. H., aged 42, a miner, was admitted into the York County Hospital, under the care of Dr. Shann. He had been of late working in a deep city drain, and previously to coming to York working in a tunnel. He had been for years a very hard drinker.

November 6, 1854.—Sunk, wasted countenance of a leaden hue, and considerable prostration. He had been suffering for six weeks from low febrile symptoms, which commenced with a dysenteric affection. A fortnight ago he had a severe attack of pain in the region of the right kidney, and extending towards the iliac region. This continued almost constantly up to nearly the time of admission, but left him last

night. He had suffered also from pain and tenderness in the hepatic region for two or three weeks, during which time he had been a patient at the York Dispensary. Just previously to the commencement of the illness he had been for three days almost constantly in a drain in the city twenty-five feet deep. He and most of his fellow workmen suffered from bowel complaint.

There was no marked dulness on percussion at the base of the lungs, but posteriorly, at the right base, subcrepitant ronchi and bronchial respiration and bronchophony were audible, and finer crepitation at the corresponding point on the left side.

7th.—Tongue coated with dirty-brown fur in the centre, clean and moist at the edges. No appetite. Bowels purged yesterday, and the motions were loose and clay-coloured; urine passed during the night and this morning, large in amount and of very dark colour, but not albuminous. Pulse 64. ℞ Pulv. ipecac. co. gr. ij., hyd. eum cretâ gr. jss. ft. pil. j.; 4tis hôris sumend. ℞ Decoct. cinchonæ ad ʒj. sp. am. ar. et tinct. cascarillæ, āā, ♏xxv. M. Ft. haust. 6tis hôris. Mustard plaster to the loins. Wine.

9th.—Tongue cleaning and moist; appetite somewhat improved; bowels twice opened during the night, motions darkish-brown, loose and slimy; urine clearer and not so high-coloured as before. Had had much pain in the region of the right kidney, and down that side of the sacrum, but it had nearly disappeared this morning. Some degree of dulness and subcrepitant ronchus at the base of the right lung, in the region of the pain complained of, but no cough. The expectoration was small in amount, and very glutinous; pulse 64. Had several "cold perspirations" during the night; and darting pain in the head. A blister was applied to his chest.

11th.—Tongue cleaning; bowels twice open during the night, motions not loose and not very dark. Pulse 82; skin generally perspiring for some hours, which appears to afford relief; urine high-coloured and having a strongly alkaline action on test-paper.

14th.—Pulse 72, soft and moderately full; no pain since last seen; perspiration rather profuse. The legs feel cold and numb; urine sufficient in quantity, of a muddy, yellowish-brown colour and strongly alkaline.

16th.—Pulse 84, and soft; tongue quite clean, and of a venous hue; bowels open, motions not very solid, and green. He had slept much for the last two nights, and continued to perspire, but not to excess.

21st.—A well-marked fullness (from the formation of matter?), soft and fluctuating, was discovered in the right lumbar region, above the position of the kidney. He had been sweating profusely; but this has diminished since taking the following mixture, ordered on the 18th:—℞ Acid. sulph. dil. ♏viij., liq. quinæ ♏viij., tinct. card. co. ʒss., aquæ menth. pip. ʒss., aquæ font. ad ʒj., M. ter die sum. Tongue clean; bowels purged several times daily; pulse 86, and soft.

28th.—Pulse 102, and soft; tongue white; bowels regular, and not loose, "motions natural." Swelling in the lumbar region very considerably enlarged since last examined. He now says that for several years he has brought up blood, if he took cold, apparently from the stomach, and without cough.

30th.—He began for the first time yesterday morning to cough severely, and has since expectorated about three pints of thick pus. Pulse 108, small and weak. No perspiration during the night. He slept for five hours.

December 2.—Pulse 90; tongue less dry than yesterday. He has spit up only about six ounces of pus during the night, and scarcely any this morning. He dozed, but did not get sound sleep, during the night.

During respiration the air can be heard passing through fluid in the abscess in the right loin, and he says that he can hear "the splashing" of the fluid there when he coughs. The abscess is perfectly flaccid, and nearly emptied. He takes his diet—wine, beef-tea, and arrow-root and milk—pretty well. Bowels quiet. To take two doses of a night-draught, ordered on the 16th, during the night, if required,—℞ Acet. morphiæ gr. ¼, tinct. camph. co. ʒj., mist. camph. ad ʒj. M. Ft. haust. h. s. s.

5th.—Purged six times within the last twenty-four hours. He did not sleep much; has brought up about four pints of pus from the lungs since the three last noted, but only a few ounces during last night. Pulse 92. Respiration of a dry, cavernous character heard over the abscess, and percussion in that situation tympanitic or cavernous. He takes his food pretty well, and takes two or three doses of the opiate night-draughtif required; and a mixture ordered November 21,—℞ Tinct. cuspariæ, tinct. calumbæ et sp. am. ar. āā, ♏xx. ex mist. cretæ ʒj. M. t. d. s.

8th.—Pulse 110; bowels quiet. Had a good night; spit up about three ounces of pus during the last twelve hours; countenance not quite so sunken. Two tea-spoonfuls of cod-liver oil three times a-day.

9th.—This morning a small ulcerated opening formed in the abscess, towards its anterior margin, three or four inches above the crest of the ilcum. Only about an ounce of pus escaped. The abscess looks fuller than previously. A counter opening was made by Mr. Husband in the most dependent part of the abscess.

13th.—Bowels quiet; urine pretty free, alkaline. He now rests well, and takes his food tolerably, but cannot take animal food, except bacon. He has hitherto taken wine or brandy every three or four hours.

14th.—His cough was troublesome, and he did not sleep so well last night. Bowels quiet. No night sweats. Urine very alkaline, and feels "sharp," and he had some difficulty in retaining it. Sumat mist. acid nit. dil. etc.

22nd.—Pulse 140. Apparently sinking.

25th.—Died at ten a.m.

Autopsy.—Excessive emaciation of the body generally. An elongated, loculated abscess, or series of connected cavities, extending through the entire length of the right lung, from its lower portion, which was adherent to the diaphragm, to the apex. An opening through the diaphragm into an abscess formed in the right loin, which had its origin in the areolar tissue connected with the right kidney and the corresponding portion of the diaphragm. Hence a free communication between the abscess in the lung and that in the loin. There was no apparent inflammatory alteration of the pleura. At the posterior part of the inferior lobe of the same lung, there was a portion, the size of a small egg, in a state of induration, so as to cut like somewhat soft cartilage, the result probably of some previous attack of inflammation. This accounted for some of the stethoscopie phenomena. The left lung presented no striking morbid alterations. In the right kidney, one of the cones presented a white cheesy section, the result apparently of tubercular deposition. The serous capsular covering was roughened from adhesions, at the part corresponding with the seat of the abscess. The left kidney was apparently healthy. The liver was pale, but otherwise healthy. The intestinal canal, though not very carefully examined, presented, so far as could be observed, no morbid change.

ST. BARTHOLOMEW'S HOSPITAL.

WOUND BY A HATCHET PENETRATING THE KNEE-JOINT—RECOVERY.

(Under the care of Mr. STANLEY.)

[Reported by Mr. HERBERT EVANS.]

James D. was admitted on Friday, October 19, 1860, having on the previous Wednesday by accident hit his knee with a hatchet. The joint was swollen and painful, and there was a small wound about half-an-inch long, on the outer side, made evidently by the sharp corner of the hatchet. He stated that he lost a good deal of blood at the time. He was ordered milk diet. Eighteen leeches were put around the patella, and a large poultice afterwards applied. He felt greatly relieved the next day, but there was still a great deal of pain; he therefore had twelve more leeches on. They bled freely, and he was greatly eased. He did not sleep well, and being very restless, opium was given at night for the first week.

After he had been in the Hospital a few days, it was quite evident that the joint was opened (as there was a discharge of synovia), and that there was suppuration in the joint, by the discharge of pus. The limb was put on a splint and kept quiet. Opium was given at night for a few nights longer, and a little aperient medicine. All went on

quite satisfactory, the swelling about the knee getting smaller and less painful, and the discharge gradually diminishing. In the fourth week the discharge ceased, and a few days afterwards the wound quite healed. The limb was put on a pillow. The patella moved freely; and on moving the limb a preternatural mobility of the joints, from relaxation of the ligaments, was observed. The leg and knee-joint were covered with a firm case of gum and chalk, and the boy was ordered up. In a few days he managed to walk about pretty well, but complained of his knee aching if he walked much. He left the Hospital on December 30, the gum and chalk having previously been taken off to see the state of the joint. There was still some swelling of the joint, though it was less; there was more mobility than should be. He stated that it felt as strong as ever when it was cased up. It was again put up in gum and chalk, and he left the Hospital in the tenth week after admission.

THE NORTHAMPTON INFIRMARY.

CASE PROVING THE POSSIBILITY OF WALKING AFTER FRACTURE OF THE NECK OF THE FEMUR.

(Under the care of Mr. TERRY.)

[Reported by Mr. GRAY.]

J. W., aged 60, was admitted on November 7, 1858, having been knocked down by a cart, about sixteen hours before, while walking along a narrow lane. He stated that he received his injury, not by the cart-wheel striking him, but by the subsequent fall, and he pointed out the trochanter major as the part upon which he fell. After the accident he got up, and, without assistance, contrived, though with much pain and difficulty, to walk a distance of rather more than a mile towards home. He was then seen by a Surgeon, who informed him that his thigh was broken, and advised his removal to the Hospital. On admission, the upper part of the right thigh, including the groin, was much swollen and ecchymosed, and a good deal of pain was complained of when the parts were manipulated. The limb could be freely moved in all directions; it was shortened rather more than an inch with the foot everted. When the limb was extended to its proper length and rotated, bony crepitus was detected with the greatest facility, and the trochanter moved freely in rotation of the limb. The anterior superior spinous process of the ilium and the trochanter major were unduly approximated, the distance between them being fully an inch less than on the opposite side. He was unable or unwilling to raise the limb from the bed, but said that he thought himself capable of doing so if not prevented by pain. His leg was carefully placed on the long straight splint, and at the end of the fifth week he could raise the foot several inches from the bed, and complained of but little pain when the limb was rotated. Crepitus, however was distinctly perceptible. The splint was re-applied, and kept on till the end of the ninth week, but on removing it, crepitus was still detectable on free rotation of the limb. A gutta-percha splint was then applied, and he was allowed to go on crutches for another fortnight, when he was discharged. The limb remained shortened about one inch and a-half, the foot everted, and some little crepitus was readily discoverable when the limb was freely moved. He has since been reported as remaining permanently lame.

Remarks.—Instances of fracture of the neck of the femur in which the injured limb has retained considerable strength, and in which even the power of locomotion has remained to the patient, have been frequently reported. In no case that has fallen under my own observation, or that I have seen recorded in books, has it happened that a patient suffering under this accident has been able to accomplish the pedestrian feat of walking a distance of upwards of a mile without any extraneous assistance whatever. The symptoms of the injury were, on his admission, perfectly unequivocal, and the progress and result of the case in exact accordance with the nature of the accident. There was an entire absence of any symptom of pre-existing disease in the neighbourhood of the injury; and the precise length of the patient's uncomfortable journey could be accurately estimated.

FRACTURE OF THE COLLES' RADIUS—DISSECTION OF THE INJURED LIMB.

[Reported by Mr. GRAY.]

R. J., aged 39, was admitted on March 15, 1860, in a state of considerable but not extreme collapse, having fallen to the ground from a height of about sixty feet. There was a large lacerated wound in the right foot, exposing the os calcis and calcaneo-astragaloid articulation, the bone being completely pulverised. The collapse speedily became more intense, and associated with pallor of the lips and an anæmic aspect, and the patient died five hours after admission, the cause of death being discovered in a fracture of the right os innominatum, with great effusion of blood into the pelvic cavity, and subperitoneal tissues of the abdomen.

The patient was, however, also the subject of a fracture of the base of the right radius, and thus afforded an opportunity of dissecting this injury while quite recent.

The symptoms of the injury were, during life, quite unequivocal. The "silver-fork" deformity was very well marked, the patient, however, retaining the power of pronation and supination in a considerable extent. The head of the radius rotated distinctly in obedience to movements communicated to the hand. Forcible adduction of the hand formed a distinct angle salient along the outer border of the fore-arm about an inch above the wrist-joint. No crepitus was detectible until very forcible extension was employed, when this symptom also became plainly recognisable. A careful dissection of the fore-arm was made twenty hours after death, the rigor mortis being at the time extremely developed—so much so that the elbow could be extended only by the exertion of considerable force. There was much blood extravasated in the cellular tissue in the neighbourhood of the injury, chiefly on the palmar aspect of the fore-arm, and a much smaller quantity was effused upon, and into the substance of, the flexor longus pollicis and pronator quadratus muscles. The other muscles were scarcely stained with blood. The long flexor of the thumb was prominent and bulging among the more superficial tendons; the supinator longus tendon occupied its normal position, and was certainly not in the least degree tense; the extensors of the thumb were slightly elevated from the bone at the seat of fracture. The bone had given way a little more than an inch above the wrist-joint—as nearly as possible one-half of the pronator quadratus remained attached to the upper fragment, the remaining half to the lower. The fracture was directly transverse; the upper fragment was pronated and projecting on the palmar aspect of the fore-arm, and the compact tissue of its dorsal and palmar surfaces was extended in the form of two spines about a quarter of an inch in length projecting below its cancellous tissue, the dorsal being a little the longer of the two projections. The lower fragment was twisted so that its articular surface looked outwards, downwards, and backwards, so as to bring the palmar and dorsal edge of the inferior articulating extremity of the radius into the same horizontal plane; and two thin plates of the compact tissue of its dorsal aspect were all but detached from the rest of the bone, being attached only close to the joint, which itself was uninjured. Until the fragments were forcibly separated they formed a retreating angle along the radial border of the fore-arm at the seat of fracture, and were impacted with moderate firmness; the posterior projecting spine of the upper fragment being thrust beneath the thin splintered plate of the lower fragment, and its anterior spine projecting beyond and overlapping slightly the lower fragment, forming the apex of the angle caused by the projection of both fragments toward the palmar aspect of the fore-arm.

FISKE FUND PRIZE QUESTIONS FOR 1862.—1. What evidence is there that inflammatory and febrile diseases have undergone any general change in type? 2. Gunshot wounds, especially those caused by newly-invented missiles. One hundred dollars will be awarded to the author of the best Essay on the first of these subjects, and fifty dollars for the second subject. Essays to be forwarded to the Secretary of the Fiske Fund Trustees, Providence, Rhode Island, free of expense, by May 1, 1862. The Prizes for 1861 have been awarded to Dr. Slade, of Boston, and Dr. Gaillard, of Philadelphia; to the former for a dissertation on Aneurism, and to the latter for one on Ozone.

Medical Times and Gazette.

SATURDAY, AUGUST 31.

THE CINCHONA IN INDIA.

Our readers cannot fail to detect the due significance of the communications which have appeared in the *Medical Times and Gazette* of the present year respecting the revived use of arsenic as a remedy for malarious fever in India. The arsenical treatment has, if we are correctly informed, been tried on an extensive scale by Mr. Turner, of the Bombay Horse Artillery, during the last twenty years. In consequence of his success, the Surgeons of the Indian Army generally were invited by authority to try it themselves, and report upon it, and the communications which we published in our last volume from Mr. Chapple, in charge of Royal Artillery at Poona, and subsequently from Assistant-Surgeon Brake, of the Second Sikh Cavalry, show how largely it has been tried, and how beneficially. These communications establish the fact that arsenic may be taken in large doses by patients of all ages, and of every race and constitution, with the happiest results, in most cases of malarious fever. So much as a grain, or a grain and a-half, has been given in divided doses during the six hours preceding a paroxysm.

Yet it is evident, upon the face of these reports, that arsenic is, on the whole, inferior to quinine. According to Mr. Brake, it is a slower remedy, and the treatment by arsenic is made more speedy and more certain when a certain quantity of quinine is combined with it. There is an account in Mr. Chapple's paper of a large per-centage of cases in which arsenic failed, and quinine was given afterwards: although it is but fair to say that the failures occurred most frequently in the cases in which arsenic was used most timidly. Then there is the risk of setting up considerable irritation of stomach and bowels, although it is clear that the skilful combination of aromatics suggested by Mr. Turner diminishes this risk, and that much gastric irritation is due to the fever, and is relieved by the arsenic. So that there is no doubt that we possess in arsenic a very valuable febrifuge, and one whose virtues will be developed by the greater skill in its use which is created by greater experience. Nay, we know that in malarious districts in England the poor could not exist without the "tasteless ague drop," as the arsenic is called, and that it sometimes confirms a cure which the quinine has left imperfect.

Still, quinine is a better remedy. "I was loth," says Mr. Chapple, "to abandon quinine; I had abundant proofs of the powers which it possesses over fevers; I could invariably exhibit it in two or two and a-half grain doses with perfect confidence in its success. Why, then, should I adopt in its stead an uncertain remedy, and one requiring much caution in its administration? I did so in order to test the value of arsenic, which, if possessing good antiperiodic virtues we might substitute for quinine, and thereby save a valuable drug for cases in which it is indispensable. If," he continues, "quinine is daily becoming more scarce, we shall be obliged to relinquish its use for all diseases in which it is not *absolutely* required; and it is well to have a remedy which will diminish the great drain on quinine." He goes on to say: "I do not imagine that arsenic will ever supersede quinine; neither do I attempt to prove their equality." It is the increasing scarcity, and perhaps the impending total failure, of a drug upon which the Indian Government already expends £50,000 a-year, which has led him and others to look out in time for a substitute.

The annual consumption of quinine is enormous. Exclusive of its uses as a tonic to restore appetite and strength, it is the means, *par excellence*, whereby white men may live in malarious countries. Few travellers start on a lengthened journey without providing themselves with about an ounce per man. The failure of quinine, therefore, would be a calamity to all civilised nations, more especially to ourselves.

Yet such an event is not impossible in the nature of things. The district in which the valuable species of cinchona flourish is extensive, but not indefinite; the bark bears a value which stimulates the work of destruction; and, worse than all, the Governments—or rather the system of half anarchy, half tyranny under which the debased populations of the New World are degenerating—seem destitute of the energy or the foresight to economise the existing supply or provide a future one. All competent observers bear witness to the rapid extermination of the cinchona. "Where formerly," says Dr. Weddell, speaking of Bolivia, "one met with them everywhere in the vicinity of villages, now to find a tree of a few decimètres in diameter, it is necessary to make a journey of several days' duration into the bosom of the forests." Mr. Clements Markham, during frequent journeys through various parts of the forests of Caravaya, never once met with an old tree, though young plants and root shoots of the *Calisaya* abounded. Mr. Spruce says that in the cinchona forests of Ecuador there does not remain a single plant large enough to produce seeds. And we are told, as an exceptional example of foresight, that the people who fell bark trees in the vicinity of Chimborazo, are said to be in the habit of breaking off young branches and sticking them into the ground—as if the provision for a new crop were a superhuman effort of foresight!

No wonder, then, that Ainslie suggested, and that Royle urgently recommended steps to be taken for the introduction of this health giving tree into India; nor that the thrifty and plodding Dutch have already commenced a plantation in Java, with some success. Attempts were made, too, by the Indian Government, at Dr. Royle's instigation, in 1852, but they led to nothing. At last, however, the deed has been done thoroughly and successfully. Our Government were fortunate in possessing a servant in Mr. Clements R. Markham, F.R.G.S., who signs his name with the modest title, "Junior Clerk in the India Office," but has been known from his boyhood as an indefatigable traveller, having accompanied one of the late Polar Expeditions, and being equally at home under the Equator. By a fortunate coincidence, he had travelled extensively in Peru, and possessed what is well described as "a thorough knowledge of the country, the people, and their languages, as well as an intimate acquaintance with the forests and the valuable species of cinchona trees; rapidity in performing the work, which is equivalent to economy; and tact to ward off the jealousy of a benighted Government and the fanaticism of an ignorant people, who imagine that their trade will in some way be injured by the introduction of quinine-yielding plants into other countries." To this gentleman the task was assigned, and his thorough execution of it deserves the acknowledgments of our Profession.

The districts in which the cinchonas grow appear to be extensive, yet abruptly circumscribed. They extend, on the eastern slopes of the Andes, from 19° S. latitude to 11° N. Beginning at the south are the forests of Bolivia and Caravaya, in Peru, which are the homes of the *Cinchona calisaya*, or yellow bark. To the north and east of them, *useless species*, such as the *C. pubescens*, *C. amygdalifolia*, and *C. scrobiculata*, alone appear, up to the forests of Huanuco, in 10° S., where the species yielding *gray bark* commence. "Further north" (we quote from Mr. Markham), "and nearly up to 5° S., the cinchonas again become worthless, until the famous forests of Loxa are reached,—the region of the *C. condaminea*. Further

on, in the forests on the Eastern slope of Chimborazo, the species yielding red bark first appears." "Proceeding northwards, along the eastern declivities of the Andes, we find that the cinchonæ disappear in the elevated plains of Riobamba, Quito, and Pasto, up to Almaguer, but reappear in abundance north of that place, which is in lat. 1° 51′ 57″ N., and continue without interruption by the Andes of Quindio to the mountains of Merida and Santa Martha, in 11° N."

The abrupt circumscription of the cinchona-yielding territory is remarkable. "Some of the mountains of Cumana, in Venezuela, having elevations of 4000 to 5000 feet, and possessing a favourable, cool climate, are destitute of cinchona plants, though close to the mountains where they abound. The only apparent reason for this is, that *a belt of low land intervenes*, and seems to break the chain which is continuous from 19° S. to 11° N. The same may be said of the forests on the high table land of Jalapa, in Mexico, which possess a climate and elevation exactly similar to those of Upper Peru, and where the aspect of the land, the tree ferns, arborescent melastomaceæ, cool temperature, and humidity, would lead one to expect the presence of cinchonæ; yet this is not the case. This may arise from the almost entire disappearance of the Cordilleras of the Andes near the Gulf of Cupica, and the Isthmus of Panama being below the level of the cinchona region, the continuous chain is thus again broken. This sudden disappearance of cinchona at a particular point," continues Mr. Markham, "although there are localities suited for their growth at no great distance, and the distinct and well-defined limits which confine the different species to particular districts without apparent cause, are noticeable facts connected with the cinchona trees, and are, I believe, not applicable to the plants which are associated with them."

Deeply interesting as are the speculations which start up at this point, and their bearing on the question, Did it please the Creator to make each species out of hand, so to say, and plant it in its special *habitat*, or were species left to the modifications impressed on them by soil and climate? we must leave them with the observation, that this evident circumscription points to the conditions under which the cinchonæ flourish in their native forests, and which must be provided in any attempt to propagate them elsewhere. The general conditions are, great elevation and incessant moisture; and be it observed that *soil* and elevation alone are insufficient. The Bolivian forests are 4000 to 6000 feet above the sea, in a region of lower Silurian rocks, clay slates, with veins of highly auriferous quartz,—yet in exactly the same formation and same climate the valuable species disappear. Out of nineteen alleged species, "only eight," we are told, "are of the least value for obtaining quinine or cinchonine." The alkaliferous species seem to require special conditions. "The cinchonæ, which are rich in alkaloids, inhabit the peculiar cloudy region of the Andes, in which during the rainy season, which continues for nine months in the year, a steady rain is only interrupted during the day by short gleams of sunshine, interchanging with clouds and mist; while in that part of the year which answers to our winter, cold nights, in which the temperature of the air descends to freezing point, are followed by days in which the rays of the sun, piercing here and there through the thick clouds, raise the temperature to 77° F., while the leaves are kept almost constantly bedewed by the continual mists."

Such are the regions in which the valuable cinchonas flourish, and from which they were to be collected. We wish that our space permitted us to trace the adventures of Mr. Markham, who left Arequipa on March 22, 1860, travelled over snowy heights, several hundred feet loftier than Mont Blanc, in the worst season of the year to Puno; thence to Caravaya, into the valley of Sandia, thence into the heart of forests, climbing ravines, fording rivers, evading hostile functionaries, conciliating ignorant and suspicious natives, and managing obstinate mules; living on the worst food, making notes and collecting specimens of the soil and of the plants which grow along with the cinchonæ, collecting 529 valuable plants, which had to be carefully packed and protected from heat and dryness, then to be taken across the bleak mountains, where they were in danger from the cold, and shared at night the traveller's tent and blankets; at length he arrived with his charge in good condition at the port of Islay, on June 1. There, with a forethought which characterised the whole proceedings, he had obtained a supply of proper soil from a neighbouring ravine, and there had been brought from England a supply of those cases, which bear the honoured name of Ward, the true father of Crystal Palaces. Mr. Ward may have the gratification of knowing that his invention not only adds facilities to the cultivation of natural science, and to the recreation of the townsman and the invalid, but that it contributed to the success of this most beneficent scheme for the propagation of the cinchona.

In addition to the plants brought by Mr. Markham from the Caravaya region, Mr. Spruce was employed to collect seeds of the red bark in the forests of Chimborazo. Unfortunately the Wardian cases, instead of being sent direct by steamer to India, were brought round *viâ* England and the Red Sea, where many of the plants perished by the heat. Nevertheless, a depôt of plants and seeds was established at Kew, by which all risk of failure has been obviated.

In India the difficulty was to find a situation provided with that incessant supply of moisture which seems indispensable for the alkaliferous plant. The search was made, however, with the light of a full knowledge of the whole conditions of the cinchona region in the other hemisphere. The first site which has been chosen is in the Neilgherry Hills at the highest available elevation that could be found south of the Himalayas. It is a wooded ravine at the back of the range of hills which rises behind the Government Gardens at Ootacamund, sheltered, 7450 feet above the sea, with a flora analogous to that of the native forests in Peru, with an identical temperature, and a moderate supply of rain and mist during *both* monsoons. A second site has been chosen in the Neilgherries, and one at Coorg. At the first of these localities the following were, as we are informed by an authentic memorandum, the "number and condition of the cinchona plants in the Neilgherry Hills, June 9, 1861:—

C. Calisaya (yellow bark)	6	(original plants)
C. Succirubra (red bark)	967	(463 plants, 504 seedlings)
C. Nitida (grey bark)	430	(raised from seeds)
C. Micrantha ,,	511	(raised from seeds)
C. Peruviana (a) ,,	200	(raised from seeds)
Total	2114	cinchona plants.

The plants generally are in a very healthy and promising condition; some of them are in the finest possible state of health and luxuriance. The seedlings are now three inches high, and beginning to form branches. It is intended to plant them out in June, 1862, when there is every reason to expect that the stock will have increased to 60,000 cinchona plants."

Thus far then, this grand experiment may be considered a decided success. It remains for the Government, and still better, for private capitalists, English or Indian, to seek out localities provided with the requisite elevation and continuous moisture, and to commence the cultivation of the bark under such conditions as will yield the greatest quantity. Mr. Markham recommends that the tree should be cultivated in the shrubby form, like the cinnamon and coffee, and encourages the coffee planters of India and Ceylon to add this to their operations.

(a) A new species lately named by Mr. Howard.

Any one who knows what practice amongst the poor in England is, whether in the out-patient department of Hospitals, and Dispensaries, or amongst parish patients, will know what a struggle between conscience and pocket is involved in a large use of quinine. To their honour be it said, the Parish Surgeons, ill-paid as they are, do not begrudge the costliest drugs. We trust that search will still be made for cheap vegetable substitutes for quinine. Olive leaves were tried very successfully at the Civil Hospital at Smyrna during the Russian war, and the French report very well of parsley. But there is no one who will not rejoice at the prospect of an increased supply of quinine, or who will refuse his share of praise to the enterprising traveller who has executed this—one of the grandest and most beneficent operations of modern civilization—with a completeness, knowledge, prudence, and energy that both commanded and deserved success.

THE WEEK.

The Army must have Surgeons. It ought to have the best. Unspeakable is the saving that would result from having, as Army Surgeons, the most hopeful amongst the young members of our Profession; the men of good family, good education and energy, who are sure to do well in the world. Such men must be tempted; and there are just two rewards to be held out to them,—money and honour. The latter is uncostly in itself, but of wonderful efficacy; and without it no money will tempt the best men. Honour is the appropriate reward of deeds of self-devotion and gallantry. Surgeons in the army cannot do their duty without exposure of their lives, equal, if not greater, than if they were combatants. Yet the miserable routineers in office who waste men's lives by their imbecility, lose no opportunity of making "the position of the Army Surgeons as degrading, and their Profession as odious to them, as official ingenuity can contrive." We quote from the *Saturday Review*, which we are glad to see promoting the most true doctrine, that it will be vain to hope for an efficient Medical staff in the army, until it is duly recognised as a *military* service, and entitled to participate as fully as the case justifies, in military honour and *prestige*. We may recall to our readers' memory the fact that Guthrie died without a decoration, because Government offered him a *civil* one, and he felt that he should be degraded by accepting it.

"The treatment," says the *Saturday Review*, "to which we subject our Medical officers, and the consequent condition of the Medical Service, bring us anything but honour in the eyes of those who know the state of Continental armies. Our service is said to be in this respect, very nearly the worst in Europe. There is no economy more wasteful, no prejudice more pernicious, than that which denies to the soldier the benefit of the best Medical men that can be obtained for him. It is quite clear that if such energy is shown as has been displayed during the last three years in rendering the service unpopular, we shall have to content ourselves with such Medical skill as can be obtained from the style of men who have no constitutional objection to insult and humiliation. We are at liberty to choose between the gratification of the traditional punctilios of the Horse Guards and the health of the Army; but it is necessary to remember that we cannot enjoy both luxuries at once."

On Friday, the 23rd instant, a deputation of Members of the "Association of Medical Officers of Asylums and Hospitals for the Insane" was received at Dublin Castle by the Right Hon. Sir Robert Peel, Bart., M.P., the new Chief Secretary for Ireland. Dr. Lalor, the President of the Association, and Dr. Stewart, Resident Physician of the Belfast District Asylum, brought under the notice of the Chief Secretary the grievances which had been discussed at the recent meeting of the Association, and to which we referred in our last week's number. At the close of the interview, which was long and satisfactory, Sir Robert stated that he would not fail to give his best attention to the several points which had been brought before him, and expressed himself much gratified by the important information he had obtained from the deputation.

A Mr. Hughes has proposed to apply Dr. Van Heche's system of ventilation to mines. As we observed in a recent article, if air will not go where we wish it, we must drive it; and instead of trusting to languid currents created by indirect means, for the ventilation of courts of justice, crowded assemblies, and mines, it really seems more rational to set up a steam engine, and pump it in per force.

An immense body of rock at Penrhyn slate quarry fell down on Saturday week from being insufficiently shored. A piece, weighing about five tons, fell upon one man, smashing him in a most awful manner. His heart was found entire, about five yards from the body, and when seen first it actually palpitated. An arm likewise was literally cut off and thrown from the body. Several other workmen escaped sudden death almost miraculously.

We learn from the *Times* that

"The Confederates had released on parole a number of Federal Surgeons captured at Bull Run. They were complimented by Generals Johnston and Beauregard for their courage in remaining on the field of battle. The returned prisoners stated that the prisoners at Manassas were kindly treated. Provisions were cheap at Richmond. The reported bayonetting of the Federal wounded is denied by the Surgeons; also the firing at the Federal hospitals."

This we hope will encourage other Surgeons not to desert their wounded, and to correct slanders current about the enemy.

Dr. Neligan, who has so ably conducted the *Dublin Quarterly Journal of Medical Science* during the last twelve years, has been compelled, by the pressure of other engagements, to relinquish the management of that periodical. The high reputation which the Journal attained to during his tenure of office, is known to most of our readers, and the point and fairness of its reviews have met with general approbation. Dr. George H. Kidd, who has of late years, largely contributed to its pages, is the new Editor, and under his auspices the November number will appear.

We trust the time will soon come when habitual intoxication will be treated as a disease or a crime, and be dealt with accordingly. Then such disgraceful tragedies as the following will be averted:—

"An inquest was held on Saturday afternoon, before Mr. G. S. Brent, the Deputy-Coroner for West Middlesex, at the Silver Cup, Cromer-street, Gray's-inn-road, on the body of Mr. William James Andrew Fleming, aged 39, an engineer, late of 8, Palmer's-terrace, Holloway-road, who committed suicide by throwing himself out of window while in a state of temporary insanity. The evidence set forth that, on Monday evening last, about five o'clock, an intimate friend in the neighbourhood, named Crowdace, called upon the deceased, and, on being admitted by the servant of the house, he proceeded to his friend's room, and found him agitated and talking incoherently. While he was there two Medical gentlemen attended, who prescribed for him, and ordered him to bed. Mr. Crowdace remained in the house for a considerable time, when, about two hours afterwards, the servant entered the room in which he was sitting, and said, 'Oh, Sir, make haste; master may throw himself out of the window.' He accordingly hurried upstairs to his friend's bed-room, and

just as he got the door open he perceived his friend leap from the window into the street. He ran downstairs and carried him into the dining-room in a perfectly insensible condition. He was then removed to the Royal Free Hospital. Mr. Hill, the House-Surgeon, examined the deceased, and found a wound on the right temple, numerous cuts and marks on his head, which was bald; also compound fractures of both his legs. The wound on the temple, as also those upon the head, were stated to have been inflicted previous to the fatal leap, by the deceased dashing his head against a marble mantelpiece, and by injuries from a corkscrew. Deceased had never expressed his intention of committing self-destruction, but the family kept a constant watch over him, owing to his being addicted to intemperance. A gentleman relative expressed his regret, and also that of the other relatives, that, notwithstanding their endeavours to obtain restraint by means of a lunatic asylum for the unfortunate deceased, and thus to preserve his life, they were unable so to do in consequence of being unable to produce a Medical certificate. The Deputy-Coroner said it was to be regretted that there were no means in this country, otherwise than by a Medical certificate, for placing persons suffering from the effects of excessive intemperance under restraint. He believed that, if ready appliance and consent were given in many cases of delirium tremens, life would be saved. The jury concurred in the remarks of the Coroner, and without further comment returned a verdict of 'Suicide under temporary insanity.'"

The following case testifies, if any testimony were wanting, to the folly and danger of members of our Profession who venture to see women unaccompanied, and to make investigations which may be misinterpreted:—

"Mr. David O. West, a Surgeon and Apothecary, of No. 15, Esham-place, Dover-road, was brought before Mr. Combe, charged with committing an indecent assault upon Catherine Hobbs, 14 years of age. Mr. Fletcher, in defence, said that his client was a highly respectable man, a member of the Royal College of Surgeons. On the Saturday night, when the assault was said to have been made, he was having supper with his wife, a gentleman named Parker, and his nephew, in a room at the back of his surgery. When the girl came in he went into the shop and attended upon her. He asked her what was the matter with her. She laughingly replied that she was afraid that she was in the family-way. He accordingly asked her into his surgery, and drew the blind looking into the parlour, but leaving the door open to the shop, and told her he would soon settle that. His client lighted the gas in the surgery and examined her as privately as possible, doing nothing more than a Medical man would do under the circumstances. He told her she was not in the family-way, when she quitted the place in the ordinary way. It was not likely that his client, a respectable Surgeon, would commit himself in the way stated by the girl, in a room adjoining that where his wife and family were taking their supper. Mr. Combe observed that the girl had given her evidence in a straightforward manner, and, although the learned gentleman had cross-examined her with some ingenuity, he had not in the least shaken her testimony, which was corroborated in some way by her own mother and another witness. This was a case he could not deal with; in fact, it was important to the prisoner that the charge should be thoroughly investigated before a jury. He must be committed for trial, but he would accept bail for his appearance."

UNIVERSITY OF ST. ANDREWS.

MEDICAL EXAMINATION PAPERS.—1861.

First Examination.

FIRST PART.

Translation of a paragraph from Latin into English.

Give the derivations of primary meanings of the following words:—Amenorrhœa, artery, colon, epiglottis, pachydermata, symptom, teratology, and trachea.

SECOND PART.

CHEMISTRY.

1. State concisely what you understand by a radical, an alkali, a base, an acid, and a salt.

2. What is the ultimate composition of spirit of salt, of Prussian blue, of mulberry calculus, and of writing ink?

3. How is corrosive sublimate made? And what are its tests?

THIRD PART.

MATERIA MEDICA AND THERAPEUTICS.

1. Describe the mode of preparing iodide of potassium, and state what you know regarding its mode of operation and uses. In what cases is bromide of potassium employed with advantage?

2. Describe the mode of operation and uses of acetate of lead, and write a Latin prescription (without using symbols or abbreviations) for a mixture of pills containing it, with directions for use; the case being supposed to be one of pulmonary hæmorrhage.

3. How is the tincture of the sesquichloride of iron prepared? State your reasons for or against prescribing it in conjunction with an alkali or alkaline carbonate. What are its chief therapeutic uses?

4. What plants of the order Convolvulaceæ are used in Medicine? What parts of these plants are employed, and what is their mode of action on the economy? Describe the composition of the pharmacopœial powders in which they occur.

Second Examination.

ANATOMY AND PHYSIOLOGY.

1. Describe the pelvis, especially noticing its boundaries, position, axes, and the differences between the male and female pelvis.

2. Give the course and relations of the internal maxillary artery.

3. Describe the general anatomical relations and minute structure of the kidney.

4. State what you know regarding the following points in connexion with respiration:—(1) The changes in the exspired air. (2) The amount of inhaled oxygen as compared with the amount exhaled. (3) The influence of various circumstances in modifying the elimination of carbonic acid. (4) The quantity of carbon excreted daily by the body. (5) The space in cubic feet that should be allotted to every patient in the wards of an Hospital.

5. Describe the mode of formation, structure, and uses of the placenta.

Third Examination.

N.B. In answering the practical questions, the Examiners require every Candidate to specify the mode of treatment which he is in the habit of adopting, and the doses of the medicines which he prescribes.

PRACTICE OF MEDICINE.

1. Describe the oxalic acid diathesis with especial reference to (*a*) the properties of the urine, (*b*) the constitutional symptoms, (*c*) the usual causes, (*d*) another diathesis into which it is liable to pass, (*e*) its treatment by medicine, (*f*) its dietetic management.

2. Name the pustular diseases of the skin, and state how they are distinguished from one another.

3. Mention, as far as you remember, the various remedies that have been from time to time employed for the treatment of tænia solium; select any three from among these in which you have confidence, and state the method in which they are to be exhibited, and the doses in which they are usually given.

4. What morbid states of the stomach, or of the system generally, increase, and what diminish the appetite?

5. A youth, aged 18, has twice during the last two years complained of severe headache lasting for two or three days and accompanied with deafness. About the beginning of December 1860 the pain returns, severe and frontal with giddiness, vertigo, and tinnitus aurium. He is seen on the 10th December. Face red, expression of exhaustion, no fever, motion and cutaneous sensibility perfect. Symptoms yield after leeching and purging, but in two days (Dec. 12) numbness commences in left arm following next day by paralysis of left arm, and in two days more by complete hemiplegia, blindness of left eye and paralysis of levator oculi on left side. Occasional leeching and purging employed, but with no improvement till January 3rd, when slight movements commence in the paralysed limbs. On the 8th, paralysis entirely gone, and on the 12th seems well. On the night of

the 12th seized with raving followed by coma and stupor, on the 16th the pulse becomes quick and small, severe diarrhœa supervenes, the tongue is red and dry. In four days (Jan. 20) the head symptoms disappear, during the next few weeks diarrhœa persists in spite of treatment, bed sores form, emaciation increases, and the patient dies exhausted on the 11th February.

What has been the probable state of the brain at the successive stages of this illness?

What appearances in the brain will you expect to find on post mortem examination?

What will be the probable state of the other viscera?

Fourth Examination.

FIRST PART.

SURGERY.

1. What is pyæmia, its causes, symptoms and termination?

2. Describe the various forms of ulcer, and the principles of treatment in each variety.

3. Describe the diseases which may occur in the antrum maxillare.

4. Two months ago a man received a blow on the testicle; it became swollen and painful, but the pain subsided and has now nearly disappeared except on considerable pressure. The swelling is now the size and shape of a lemon, and is smooth and hard to the touch.

What is the disease? explain its nature and the differences between it and other swellings which may occur in the same situation; and how would you treat the case described?

SECOND PART.

MIDWIFERY.

1. What signs of pregnancy are present six weeks after impregnation?

2. Describe briefly a characteristic rickety pelvis, a malacosteon pelvis, and an oblique-ovate pelvis.

3. Describe the mechanism of delivery of the head in the case of a footling which has descended with the back of the child looking anteriorly.

4. After delivery a woman is found to be flooding and to have the uterus inverted. What is her condition, and what treatment is to be pursued?

5. Describe briefly the ephemeral fever of lying-in women and its treatment.

DEATHS OF THE ASSURED IN THE "STANDARD"

At a meeting of the Standard Life Assurance Company, Professor Christison read an interesting report on the deaths which had occurred during the preceding five years. The report is so full of information on the important subject of the relative increase and decrease of mortality from various diseases, and on the fluctuations in alleged causes of disease, owing to changes in nomenclature and improvement in classification, that we are tempted to give an abridgment of it:—

"Out of the 582—the total number of deaths—16 have been referred to the natural decay of old age. The youngest of this denomination was 65, the oldest 87; and the mean age of them all was 77. With more care on the part of those who certify the causes of death the present list might be much reduced, for most old people die of some specific disease, not of gradual decay in its proper acceptation. In the course of my professional experience I have known only one aged person whose death could not be distinctly referred to a particular disease, and who died really of the imperceptible progressive failing of the bodily functions, which alone constitutes a true gradual decay of old age.

"Under the head of zymotic diseases there are only 40 deaths. Of this number 20 died of ordinary fever, 6 of gastric fever, and 3 of the fevers of hot climates; 5 of small-pox, one of whom was 72 years of age; and 2 of malignant cholera, one of them abroad, the other in Scotland, in the autumn of 1859, when there was no epidemic of that disease in any part of Great Britain.

"The diminution of deaths from ordinary fever during the last 15 years is worthy of special notice. The per-centage of deaths from fever has fallen in successive periods of five years from 15 to 12·6, 7, and 3·4. This result corresponds with the gradual disappearance of epidemics of fever among the working classes in Britain and Ireland, and a great decrease of fever in all Hospitals.

"Diseases of the nervous system account, as usual, for a large proportion of the mortality among those assured in the Standard Assurance Company. Apoplexy, palsy, epilepsy, chronic disease of the brain, inflammation of the brain, insanity, and delirium tremens account for no fewer than 117 deaths, or 20 per cent. of the total mortality during the last quinquennium.

"It is a current opinion that diseases of this class have been for some time on the increase in the middle walks of life in the British Islands. But a careful consideration of the facts supplied by the Company's mortality list leads to a different conclusion. During the first 20 years of the Standard Assurance Company's business, the deaths from nervous diseases were 16·66 per cent. of the whole mortality; and during the next 15 years, divided into quinquennial periods, the proportion was 18·1, 21·7, and 20 per cent. But, during the first 20 years, the number falls under the true average—1. Because in the beginning of a Company's operations the influence of nervous diseases does not tell fully, as they affect the mortality chiefly after middle life; and, 2, because between 1825 and 1845 the total mortality among the assured was raised above the average by the influence of several epidemics of fever. It is impossible to show in numbers the influence of the power of these disturbing causes; but it must be appreciable, because the average age of the 117 persons who died from nervous diseases during the last quinquennium is so high as 56. The disturbing influence of epidemic fever is more easily appreciated. If we add to the total deaths during the last quinquennium a number sufficient to raise those from ordinary fever to the same proportion as in the period 1825-45, the proportion from nervous diseases to the total mortality falls to 18 per cent., against 16·66 in the earliest period, and 18·1 in the quinquennium of 1845-50. The experience of this Company, so far as it goes, is therefore opposed to the general belief that the recent increase of luxury and other sources of excitement incidental to the modern mode of living has occasioned an increase in diseases of the brain, spine, and nerves.

"Among diseases of the nervous system, insanity is made to account for six deaths only. It has now become a practice, however, for Medical men to return deaths from this cause under the designations of general paralysis, softening of the brain, and chronic disease of the brain. If the first two only of these denominations be transferred to the category of insanity, the deaths from that cause will amount to 17, or 3 per cent. of the total mortality.

"Some surprise was excited by the statement in the last Medico-statistical Report of this Company, that eight deaths in 424 had arisen from delirium tremens; and unfavourable, but wholly groundless, comparisons were drawn from this really trivial fact as to the habits of the middle and upper classes in Scotland. Again must eight deaths be referred to delirium tremens, or other direct consequences of excessive intempeaance. Had the number been the same as in the proportion of the previous quinquennium, there would have been 11 deaths referable to this cause. The reduction, however, still leaves too many. But, in order that undue importance may not be again attached to this fact, and the apparently great frequency of such deaths compared with what other statistical statements may have represented, it is right to mention that, in any medico-statistical inquiry, in which the same pains are not taken as by the Directors of the Standard Assurance Company to test and correct the certificates of death, with express view to the publication of reports, serious omissions will infallibly arise under the head of delirium tremens. Of the eight cases now reported, four would have escaped notice were it not for the checks in habitual use; for they were at first returned, and on apparently good authority, as owing to totally different diseases.

"Diseases of the organs of respiration—viz. inflammation of the wind-pipe and lungs, pleurisy, and bronchitis, account for 73 deaths, or 12·5 per cent.

"Diseases of the heart and circulation include 66 deaths, of which 54 have been owing to diseased heart alone, or 9·27 per cent. of the total mortality.

"Diseases of the abdominal organs—viz. inflammation of

the bowels, obstruction of the bowels, dysentery, and diarrhœa, and disease of the stomach, liver, or spleen, have caused 98 deaths, or 16·83 per cent.

"Diseases of the urinary organs account for 31 deaths, or 5·33 per cent. There is a slight increase under this head, the proportion during the previous quinquennium having been exactly 4 per cent.; but the increase is only apparent, being caused by the gradual extinction of the category of dropsy in the returns, and the transference of deaths, which would have been so returned formerly, to the several diseases of which dropsy is a symptom, and of which disease of the kidneys is one of the most frequent.

"Among diseases of the organs of locomotion, rheumatism accounts for only one death, gout for two—the first proving fatal by its common consequence, disease of the heart—the second appearing in both instances to have occasioned death by gradual constitutional exhaustion.

"Diseases of depraved constitution, comprising tubercular and cancerous diseases, have occasioned 83 deaths according to the Medical certificates. But there is no doubt that the number is higher; for not a few cases returned simply as disease of the stomach or liver, and some other organs, must have belonged to the cancerous or malignant class. In the period 1845-50 only three deaths could be referred to malignant disease—that is, 1 per cent.; in the next period, 1850-55, only 5, or 1·2 per cent.; but in the period just concluded the number is 19, or 3·26 per cent. It must not be supposed, however, that an actual increase of malignant diseases is thus indicated; the higher proportion is more probably owing to the attention of Medical men having been called by former reports to the importance of distinguishing these diseases in the certificates of death. Consumption, always the most important of all diseases to an Assurance Company, on account of its frequency and the early period of life at which it influences mortality, has been the cause of 63 deaths in the period 1855·60—that is, 10 8 per cent. This is a decrease since the previous period, when the proportion was unusually high—viz., 14·2 per cent. The increase on that occasion was traced to an unusual increase of assurances at an early period of life; and the reverse cause apparently will explain the recent diminution. During the first 20 and last 10 years of the Company's operations the proportion has been 10¼ per cent.—viz., 112 deaths from consumption in 1090 of total mortality. It is not probable that, with the means of inquiry which science now affords, the proportion can be reduced sensibly lower.

"The only other important list, that of death from violent causes, such as mechanical injuries, poisoning, drowning, suffocation, and gunshot wounds, will appear surprisingly numerous. No fewer than 35 deaths come under the present class, or exactly 6 per cent. of the total mortality. During the first 25 years of the Company's operations, ending with 1850, this list amounted to only 16 in 509 deaths, or 3·14 per cent.; so that the proportion of fatal accidents had been nearly doubled for the period just concluded."

REVIEWS.

The History of Medicine, Comprising a Narrative of its Progress from the Earliest Ages to the Present Time. By Edward Meryon, M.D. 8vo. Pp. 483. London: 1861.

There are few subjects, perhaps none, on which the Student or even the Practitioner of Medicine requires more correct information than on the history of Medical science and art from its earliest to its latest date. There are few subjects less studied or cared for: none on which such universal apathy and ignoranee prevail. An attempt, it is true, has now and then been made to introduce the history of Medicine as a course of Academic study; but inasmuch as no Examining Board cares to question the candidates for its licence on so unpractical a matter, the courses, admirably conceived, and well arranged, have fallen quickly and quietly into shade and obscurity.

Despite all these disadvantages, we have had constantly coming before us at some distances of time, works more or less complete on the history of Medicine general and biographical. Leclerc, Sprengel, Lettsom, Portal, Black, Ploucquet, Friend, Aitken, Bostock, Alison, the compilers of the "Biographie Médicale," Hamilton, and last, but anything but least, dear old eccentrie Atkinson, who wished only his readers (like his wife) to follow the prineiple, "Take me for better for worse, for richer for poorer;"—these have all tried their best to enlist sympathy for the history of our past, and to cull from it facts worthy of remembrance as guides in the present and the future.

We have at this moment before us Dr. Meryon filling up the latest gap in Historic Medical Literature. As he gives us a first volume of this history, we presume that more will come. This volume, forming a thick handsome work for the library shelf, contains twelve chapters, and an introduction. The first chapter on "The Earliest Condition of the Healing Art," contains a summary of the progress of Medicine from the mythical period of the Egyptian Isis, to the origin of the Greek Medicine. To the Greeks the author thinks, as Adams has also tried to show, the credit should be given of having originated the Medicine which they so clearly possessed, *i.e.*, instead of looking on the knowledge of Medicine held by the Greeks as an exotic production in the land of the Hellas, it should be considered as an offspring of the soil through the medium of the Asclepiadæ, the earliest Practitioners of whom we have any record, who probably accumulated Medical knowledge by means of tablets or archives preserved in the Asclepia.

In a second chapter Dr. Meryon traces the history of Medicine from the time of Hippocrates to the Christian Era. We detect in this review of a most interesting period, a clear and excellent critical appreciation of the characters of those early fathers of Medicine, who, in that period, laid the true foundations of the science. The description given of Hippocrates, Aristotle, Herophilus, and Erasistratus, we will briefly glance at. Hippocrates, according to Dr. Meryon, is to be considered as having been a rational empiric. Unlike Pythagoras and Democritus, the Father of Physic did not frame hypotheses from careful reasoning, but diligently observed the phenomena of nature, and faithfully drew his conclusions therefrom. Nevertheless, he did indulge in metaphysical digressions, "for having Herodicus and Democritus as teachers, it would have been something superhuman to refrain from such exercise of the intellect; but the concise and laconic style of his writings, reduced generally to the simple statement of inferences from observation, shows that his chief aim was to establish general propositions from individual facts, or in other words to pursue a course of logical induction."

As a practising Physician, Hippocrates is marked by Dr. Meryon as one who, understanding little of the structure of animal bodies, and confounding the parts in the most incongruous, and to our modern minds absurd, manner, was withal "profoundly versed in all the external manifestations of disease." "His mode of studying disease was founded on a close observation of natural phenomena, and although we may find in his writings such expressions as the origin and coction of humours, yet were the limits of human reasoning more nearly touched, and his remedial agents more skilfully administered than we as Progressionists are generally willing to suppose."

Of Aristotle Dr. Meryon teaches that the principal divisions of the animal kingdom which were first pointed out by the learned Stagyrite are still accepted as such by modern naturalists, while we may also trace back in him the elements of the theory which is maintained by the Progressionists of the present day, "for he divided the physical world into the two universal principles of matter and form; matter containing the basis or possibility of existence, and form the realization of the same. Form, in short, he conceived to be the potentiality by which matter was elaborated into its various forms, a self-creating agent."

To Herophilus, one of the early teachers of the Alexandrian school, our Author awards the honour of having been the first to teach the anatomy of man from dissections of the human body. With his cotemporary Erasistratus, Herophilus first followed the nerves to their terminations in the spinal cord and brain. "He traced the delicate arachnoid membrane into the ventricles of the brain, which he thought to be the seat of the soul; he also traced the tortuous sinuses of the dura mater into the veins, the meeting-point of which bears still his name Torcular Herophili." He saw the lacteal vessels, but knew not their use: he attributed to the heart the force and character of the arterial pulsations, and to

an affection of the nerves, the paralysis of muscles, thus stumbling, as it were, on truth, without a knowledge of the complex facts which invest such truth with the character of a legitimate deduction: like an injudicious judge, he assigned reasons which invalidated a perfectly correct judgment."

To Erasistratus some amount of criticism, or rather critical description, is applied. Thus he is said to have made some strange surmises, as to a division of the nerves into nerves of sensation and nerves of motion, but they were vague suspicions, seeing that he assigned to the nerves of motion an origin in the membranes of the hand, and to the nerves of sensation an origin in the substance of the brain itself; he recognised, however, the use of the trachea, as the tube to convey air to the lungs, and gave it its name. Seeing the necessity for the admission of air into the lungs for the purpose of respiration, and observing in dead bodies the empty condition of the arteries, Erasistratus connected the two facts, and supposed that the air which entered the lungs by the trachea was conveyed by the pulmonary veins to the left cavities of the heart, and thence, by the aorta and its ramifications, to every part of the body. Thus the arteries were supposed to be, like the trachea, simply air-passages, hence their name.

We must pass over the remaining portion of this history of the Alexandrian School to glance for a moment at "the healing art as it existed in ancient Rome," a subject which forms the third chapter of the book before us. The position of the Medical Profession at the commencement of the Christian era is thus told:—

"At the commencement of the Christian era the inhabitants of Rome appear to have been very much in the same condition, as far as their sensual pleasures were concerned, as are those of London and Paris at the present day. They enjoyed and abused the advantages of wealth, and suffered as men suffer now in consequence. Every luxury that art could invent and wealth command was indulged in, and the capital itself was inundated with Practitioners of various degrees and sects, some promising largely, like Asclepiades, while others mystified the public by propounding new doctrines which were as senseless and unreasonable as many which are proclaimed at the present day, and some even then deserved as little credit for originality. . . . Nor were men wanting who, like Endemeus and Thessalus, villified their brethren with the imputation of fallacies to the total disregard of honesty and truth."

But with the exception of this quotation, which is singularly good and appropriate, we are disappointed with the matter of this third chapter. We should have welcomed a more correct and deliberate analysis of the works and influence of Celsus, and could have dispensed with the repetition of the sayings and doings of Hippocrates.

The succeeding chapter, entitled, "Medical Sects amongst the Early Christians," is full of information. But in the biographical history which this section supplies, the leading characters were not in the main representatives of the Christian creed, nor is there any proof given that the advent of Christianity in any way influenced the progress of Medicine at that particular era. We need only observe further, that although in this chapter, by a strange incongruity, the Medical knowledge of the Druids is discussed, there are some excellent passages which deserve full quotation. The epitome of the life and works of Galen is, for example, the most comprehensive, perhaps, of any we have in the English tongue.

On the Arabian Schools of Medicine Dr. Meryon sets little estimation. The celebrity of the Arabian Schools of Medicine can only be attributed to the ignorant and superstitious condition of Europe from the seventh to the twelfth centuries, and not to any original and independent literature of its own.

We regret that we can only in the most cursory way follow Dr. Meryon through the remaining chapters of his first volume: these chapters are entitled respectively, "Progress of Medicine and its Vicissitudes from the Seventh to the Fifteenth Century," "Progress of Medicine during the Fifteenth Century," "The Principal Anatomists of the Sixteenth Century," "Paracelsus and Paré," "Influence of the Philosophy of Ramus in Medicine," "Delusions of the Sixteenth Century," "Recent Poisoning and Medical Jurisprudence," "Monograms and their Influence on the Pathological Anatomy of the Sixteenth Century," "Surgery," "Medicine and Surgery in England during the Sixteenth Century," "Rosicrucians." In these researches we find accumulated a vast store of interesting and valuable information; a store so interesting and so valuable that it cannot fail to attract attention under any arrangement, but which might have been made much more historical by a more practised historian. The points on which the critic might dwell, sometimes in support, sometimes in opposition, are as numerous as the subjects themselves. It would be easy to defend Paracelsus from much of the aspersion thrown on his name; but it would not be easy to paint a juster picture of the genius and industry of Ambrose Paré. A fairer tribute might have been paid to the grandeur of the conceptions of Van Helmont, and Vesalius might at least have received as careful a recognition as Linacre. Again, the antecedent labours to the Harveian discovery of the circulation of the blood might, and indeed ought, in a classical work, to have been much richer in detail and argument. The greatness of Harvey's real works are rather slurred over than exposed. The story of the priorty of Fra Paolo Sarpi as the discoverer of the circulation is set forth at great length, while the much more accurate and determinate labours of Ruini are omitted altogether. The actual demonstrations of Harvey as opposed to the guesses of any of his predecessors, are left out of the record, and, after an apology for our national honour by putting "truth above all things," the fact of the whole discovery is transmitted to Harvey, not unequivocally, but in the expression that "the merit still remains exclusively with Harvey of rendering the discovery available to science by tracing it to its consequences, which neither Cæsalpinus, Fabricius, nor Sarpi accomplished." All this is true; but the addition is wanted that there would have been no known circulation of the blood, though the whole works of Cæsalpinus, Fabricius, and Sarpi had been left in the hands of every anatomist then living, and from then until this day, unless Harvey, or some one of equal genius, had risen to prove the circulation by a method of research as original as it was profound, and delivered with a perspicuity of knowledge which no disciple can ever approach, even with the work of the master in his hand.

To conclude. Sympathising heartily with Dr. Meryon in his object, feeling with full force the difficulties with which he has had to contend, and recognising in certain passages the historic gift in him, we feel, withal, that there is something wanting in his work, considered as a philosophical, connected, and practical history. The style, free throughout from egotism or aught that is offensive, is utterly deficient in that force and character which essentially mark every history so written that it shall live. To be able to reverse this judgment in commenting on the succeeding volumes, —to be able to put Dr. Meryon with the Gibbons, and Macaulays, and Humes, will be to us a sincere gratification; and, as our Author has, we believe, length of days before him, and as grand a series of subjects for his future labours as ever historian found for his pen, we trust that the gratification thus hoped for will be fulfilled to the letter.

Health and Disease as Influenced by the Daily, Seasonal, and other Cyclical Changes in the Human System. By Edward Smith, M.D., LL.B, F.R.S., Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, etc. Pp. 409. London: 1861.

It is simply out of our power to *review* a book like this satisfactorily to ourselves in anything like the space usually accorded us. Happily much that it contains has already been laid before the Profession in another form, and will be found in the *Transactions* of the Royal Society, the Medico-Chirurgical *Transactions*, etc. Dr. Smith is certainly an indefatigable and most enthusiastic worker, for he seems to have submitted himself to great inconveniences, denying himself sleep and food for long periods on various occasions, in order to carry out fairly and completely scientific observations upon himself or others. The book before us is a summary of the result of his labours. Dr. Smith carries us, in some measure, over ground previously traversed by other recent and well-known experimenters; but much that he leads us over has hitherto been untrodden, or only bears the faint and scarcely recognisable impress of the footsteps of the early fathers of our art. Much that they asserted as the result of their observation, Dr. Edward Smith reasserts, but furnishes us at the same time with such an explanation as the mode of

modern research enables him to offer. The cyclical changes as respects man in health and disease discussed in the present volume are those which occur daily in the course of each twenty-four hours; those which occur weekly as the result of the customary rest and usual improved diet of Sunday; and next, those which occur with the varying seasons of the year. He then passes on to consider the "cyclical changes in the ages of man," and lastly, the "cycle of the generations of man," under which last head he strings together some brief remarks on the changes which our social habits have undergone, and on the supposed changes in the type of disease.

In the construction of the work Dr. Edward Smith separates "the details of scientific research from the application of the knowledge obtained by them to the preservation of health and the treatment of disease." He has also arranged the latter under the head of propositions. Most of these propositions will meet with ready acceptance. Many of them are such as already guide the Profession in their prognosis and treatment of disease. Dr. Smith, however, enforces them by placing them on a scientific basis.

A few quotations from these more practical parts of the book will both illustrate this, and exhibit to our readers a specimen of Dr. Smith's mode of writing. We do not profess to select the most striking of these applications of scientific research, but some of those which invite us by the brevity with which they are treated:—

"132. *Early retiring to rest is clearly indicated.*

"133. It has been shown that in the evening the rate of pulsation and respiration, and all the products of chemico-vital action, rapidly diminish, notwithstanding the presence of those influences which occasionally sustain them, and that the fall becomes very rapid at about ten to eleven o'clock at night. Hence it is evident that Nature is then not only conserving the system by lessening the waste then proceeding, but is seeking those most natural and necessary restoratives—the horizontal position and sleep—and it is our duty to listen to her dictates. Those who perform physical labour at that period must certainly do so under circumstances most disadvantageous to the production of power, and at an unusual expense to the system."—P. 73.

The following explains an important practical rule:—

"216. *The remedies for the states of exhaustion, as the delirium of inanition or delirium tremens, should be applied chiefly in the evening and during the night.*

"217. In this class of affections the symptoms increase in urgency during the night, not simply from a supposed alarm at darkness, but from the absence of the day stimuli of food and sun light, and the great diminution in the force and frequency of the action of the heart. It is the night quantity of vital action which is disproportionately lessened as compared with the day quantity, and the sole aim should be to increase that action. This is effected by food, by alcohol, by opium, and by any other stimulant, repeated with sufficient frequency from 7 p.m. until 7 a.m. During the day, after the breakfast hour, it is only necessary to allow the free influence of the natural stimuli, if they can be taken."—P. 110.

The following is Dr. Edward Smith's summary of seasonal influences:—

"306. *Summer.*—The summer season exerts the most marked power, and under its influence the body exhibits the following minimum and maximum conditions.

"307. There is the *minimum* of carbonic acid and vapour exhaled, of air inspired, of the rate and force of respiration of alimentation and assimilation, of animal heat generated, of muscular tone and endurance of fatigue, and, in general, of resistance to adverse influences.

"308. There is the *maximum* of the rate of pulsation, of the action of the skin, and the elimination of vapour, of the dispersion of heat, of the supply of heat from without, and of excess of heat, of the elimination of urea and urinary water, of the distribution of blood to the surface, of the imbibition of fluids, of relaxation of the tissues, and of poverty and carbonisation of the blood.

"309. *Winter.*—In the winter season the above conditions are, for the most part, reversed.

"310. *Autumn.*—Autumn is marked by the summer or the winter conditions, as the character of the season resembles the one or the other; but it is essentially a period of change from the minimum towards the maximum of vital conditions.

"311. *Spring.*—In the early and middle parts of the spring season every function of the body is in its highest degree of efficiency, but as it advances these maximum conditions merge into those of summer."—P. 158.

In applying these seasonal variations to the conditions of health and disease, Dr. Smith explains how muscular force and endurance is least towards the end of summer and beginning of autumn, spring being the season of greatest muscular power and endurance, then the winter; and how the sensibility of the system to temperature and tactile impression is greatest in the spring and summer. He shows, by inquiries conducted through the medium of the Returns made to the Registrar-General, that the "viability of those children is the greatest who are born in the winter and spring months;" and points out, consequently (regarding the matter in this light) that "the most suitable period for marriage are the spring and summer months." He shows, also, that the growth of children is greatest in the spring and summer, and least in the autumn and winter; and after discussing the influence of season upon alimentation, introduces some observations upon the Turkish bath. Here is his opinion about it, for no subject comes amiss to our Author—the influence of season, etc., can be discussed in relation to everything, even to Homœopathy:—

"375. Regarded abstractedly, the use of the Turkish bath is a most unphilosophical procedure in a temperate or cold climate; for, whilst the chief object of every man is, by clothing and shelter, to avoid extremes of temperature, and to keep the body in an uniform condition, this modern luxury exposes the body to the greatest extremes with which we are acquainted. It is difficult to imagine any contrivance more likely than this to be injurious when employed in an indiscriminate manner and in health, whilst it is probably a remedial agent of great power in the favourable conditions to which we have just referred.

"376. Its common victims will be the feeble, with deficient powers of assimilation, and the plethoric, with a tendency to extravasation of blood, and those who have passed middle life will be more liable to injury than the young. Its devotees should be those up to middle life who eat more food than they can transform, or than they need, and particularly food in which alcohol and animal matters form a large part, and cause the fluids to be retained in the body, and the skin to become dry."—P. 193.

The above extracts will suffice. The book is highly creditable to the Author's power of research, and it is written in a very readable style. While praising the Author for his book, however, we must suggest an objection as to the method he is taking to make it known. We actually saw it advertised in one of the halfpenny district newspapers of this metropolis. We cannot believe that such a procedure would have been directed by either Dr. Edward Smith, or his highly-respectable publishers. Still we must hold one or both responsible, if either of them gave out of their own hands the selection of the media for announcement. If this volume should be read by the Professional man, it will interest and instruct him; but we pity the unfortunate hypochondriac who might be tempted to pore over its pages. Surely Dr. Edward Smith does not seek readers of the latter class.

Question of Registering the Birth of a Premature Infant.—A case of some interest has been recently decided by the Tribunal of Tours. A woman and her husband were charged with not having registered the birth of two twin infants, and with having buried them in their garden without authority. The French law throws the duty of registering the birth of infants, whether alive or still-born, upon the parents or the Accoucheur in attendance. In defence it was pleaded that these children could not be more advanced than four or four and a-half months, inasmuch as they were born on the 7th of March, and the woman had been delivered of a child the 10th of September preceding; and that therefore the children were not viable. The validity of this defence was admitted, seeing that the Code only inflicts punishment in the case of non-registration of viable children. As to the unauthorised inhumation, also, the Code forbids this with respect to a deceased individual; but as these twins had never become individuals, and still less deceased individuals, the law could not apply.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON AN EPIDEMIC OF MEASLES AT VAL DE GRACE.

By Professor LAVERAN.

Professor Laveran furnishes this narration as a specimen of the injurious effects which nosocomial influences exert upon otherwise benign affections. The return of troops from the Italian war had the effect of producing great accumulations of troops in the military Hospitals. From July, 1859, to July, 1860, there were admitted into Val de Grâce no less than 10,000 patients. An epidemic of measles commenced in the winter of 1858-59, and abated in the summer to break out with increased force in the following winter. The result was, that of 125 patients attacked in 1860 the large number of 40 died, being 116 per 1000 of the general mortality for the year. The patients were between 19 and 28 years of age. The disease at its outset presented no signs of unusual gravity, and was unaccompanied by complications such as hæmorrhages, typhoid symptoms, meningitis, etc., which have been recorded by authors as sometimes accompanying epidemics. The more or less confluent eruption put on a very favourable appearance, and the fever was moderate; but in place of convalescence setting in as the eruption declined, gastro-intestinal derangements of the cholera form appeared, usually accompanied by a slow asphyxia, due to an excess of bronchial mucus, or the production of a great number of "leucocysts" over the entire extent of the bronchial mucous membrane. A deficiency of power of reaction seemed to prevail, debility succeeding the fever, no appetite existing. Thus, without complications properly so called, the rubeola extended along the internal tegumentary membranes, after the manner of spreading erysipelas and serpiginous ulcers. Death in most of the fatal cases having resulted from asphyxia induced by bronchial super-secretion, the mucous membrane was found congested, and its epithelium destroyed, the calibre of the bronchi being enlarged. The pulmonary veins were remarkably distended, and the pulmonary vesicles, themselves filled with mucosities, and compressed by the distended veins and dilated bronchi, exhibited red and grey *ramollissement*, giving to the tissue of the organ a marbled appearance. Professor Laveran's observations in nowise favour the statement which has been made that rubeola hastens or favours the development of pulmonary tubercles. As to treatment of these cases, little was done; for antimony, so strongly recommended by Rilliet, was found to be only mischievous. Expectation and hygienic provisions were, therefore, alone resorted to. "If we consider febrile diseases in general," the Author concludes with observing, "we find that some, as malarial diseases for example, are benefited by the very fact of residence within an Hospital, and are but little subjected to nosocomial influences. Others, again, and especially cholera, rubeola, and typhoid fever, become manifestly aggravated in an Hospital medium. In these three diseases the condition of the patient always becomes worse during the night, and in all three the respiration is manifestly affected—in rubeola by reason of the bronchial mucosities, in typhoid owing to the muscular inactivity, and in cholera through the condition of the blood. In these diseases it is of greater importance than in others to watch attentively that the ventilation shall be complete, and the other conditions of a good Hospital regimen be fulfilled."—*Gazette Hebdomadaire*, Nos. 2 and 4.

ON THE QUANTITY OF PHOSPHORUS FOUND IN THE BRAIN OF MAN AND ANIMALS.

By Professor BORSARELLI.

As the result of various chemical examinations, Professor Borsarelli arrives at the following conclusions:—1. The medium quantity of phosphorus found in the brain of man and some other animals, is more than triple that assigned to this organ by Persoz and Opermann. It varies from 1·352 to 1·790 per cent. 2. The phosphorus of the animal economy is found in largest quantity in the brain, in a less proportion in muscle, and in a still less proportion in the stomach. 3. In man, the quantity of phosphorus increases in a decided manner in proportion to his years in the brain and in the muscular flesh, and in a less marked manner in the stomach. 4. The less quantity of phosphorus found in individuals under puberty, whose development is not completed, arises from the greater quantity of this metalloid required for the solid parts of the frame. 5. The difference in the quantity found in an adult or a person of advanced age, and an individual under puberty, amounts for the brain to 1·14 compared to 1, and for the muscular substance to 2·19 as compared to 1. The amount of phosphorus found in the adult or aged person, and in the ox, the calf, the sheep and the hog (with the exception of the flesh of this last), is very much the same,—the average being, as regards the brain, 1·560 in man, and 1·553 in the animals; and as regards the muscular substance, 0·872 in the former, and 0·876 in the latter. In the hog, however, the flesh contains 1·012, being rich in phosphorus as compared with that of the other animals examined, as 1·15 to 1. This may be one of the reasons why the flesh of this animal is more stimulating than that of others. 7. Flesh by boiling in water loses one-half of its phosphorus; so that the flesh of the hog, which uncooked contains 1·012 per cent., after boiling only contains 0·567. Hence we see why in practice boiled meats are found to be most suitable for the convalescence of those who have suffered from hyperæsthenic diseases, and why roasted meats impart vigour to those whose strength has become exhausted by those of a debilitating character. The good effects of meat so cooked do not, however, solely arise from the presence of a greater proportion of phosphoric compounds. They also contain a larger quantity of the proper nutritive principles of the flesh, which being soluble in water, become lost in boiling.—*Omodei's Annali Universali*, Vol. clxxvi. p. 407.

EXCERPTA MINORA.

Excision of the Head of the Femur.—Dr. Winne has collected the accounts of the various cases which have been published of excision of the head of the femur. After adverting to the experience in favour of this proceeding in gun-shot wounds gained in the Crimea, he furnishes references to 49 cases in which it has been resorted to for *morbus coxarius*. Of these, 20 recovered, 5 were convalescent, 6 were improved, 15 died, and 3 were unreported. Four of these returned as improved died after some months. Of 15 cases, including these last, in which the cause of death is specified, 1 only died from the direct effect of the operation, 2 did so from profuse suppuration, 1 from gangrene, and 1 from secondary hæmorrhage. In 11 cases death occurred from diseases which might arise under any circumstances, as phthisis, Bright's disease, etc. In 1 case amputation had been performed for recurrence of the caries.—*American Journal of Medical Science*, July, p. 26.

Absence of the Uterus.—Dr. Nelson records a curious example of this occurrence in three of a family of five sisters, the first, second, and fourth having no uterus, while the third and fifth had this organ. The first and eldest is a widow, tall, slim, and bony, with dark eyes; the second is also a widow, with light air and grey eyes; the third is married, and mother of four children, and has blue eyes and full mammæ; the fourth, spare and dark, with blue eyes, is now married to a second husband; the fifth, 17 years of age, has full mammæ. The first, second, and fourth, who have no uterus, are thin, with small mammæ; and the third and fifth are stout, with full mammæ. The sexual desires of the first, second, and fourth sisters were ardent, and marital intercourse was enjoyed by them.—*American Journal of Medical Science*, July, p. 301.

A Bullet Lodged in the Heart for Twenty Years.—Dr. Balch, of North Lawrence, New York, details the following rare case:—In 1840 a boy, aged about 14, was shot in the right shoulder, the bullet entering through the upper border of the trapezius, about two inches from the acromion. The ball, by those who examined him, was supposed to lie about four or five inches from where it entered, in a direction towards the cavity of the chest, near the sternal end of the clavicle. In about six weeks he resumed his work, and gradually quite regained his health. In 1845 he was attacked with severe pneumonia on the right side, and then was first noticed a tumultuous action of the heart, which continued to increase after his recovery—its pulsation being seen and heard at a distance of ten or twelve feet. Another attack of pneumonia carried him off in 1860. At the autopsy the right internal jugular was found enlarged, and the external was entirely

closed, about a quarter of an inch from where it entered the internal jugular. In the right subclavian artery, at the thyroid axis, was a large ossific deposit. The heart, two or three times its natural size, was very soft and flabby; and although on the outside no scar was discernible (the pericardium was, however, very adherent on the right side), on opening the right ventricle, a leaden bullet was found imbedded in its walls.—*American Journal of Medical Science*, July, p. 294.

Surgical Treatment of Epilepsy.—Dr. Billings has compiled a statistical paper of all the cases he could find recorded:—1. *Trephining the skull* had been performed in a great number of cases in which the disease resulted from injury of the head. The cases collected by Dr. Billings are 72 in number, of which 16, or 22 per cent., proved fatal. 42 are reported as cured, 4 unchanged, and the remainder improved, but not entirely relieved. 2. *Ligature of one or both carotids* 11 cases, with 4 cured, 4 improved, 2 unchanged, and 1 dead.—*American Journal of Medical Science*, July, p. 300.

The Local Employment of Sulphate of Alumina and Zinc.—M. Homolle states that, during fifteen years, he has derived great advantage from the employment of a saturated solution (3 parts to 2 of water) of sulphate of alumina (not alumina and potash, the ordinary alum), or of sulphate of alumina and zinc, formed by adding 1 part to 10 of the oxyde of zinc, mixing in a porcelain capsule. The solution may be applied to the part with a pencil or on charpie, according to the amount of effect to be produced, or it may be mixed with equal parts of glycerine, or 5 parts may be added to 10 of almond oil and 90 of white cerate. The following are the affections in which M. Homolle has found that it exerted a powerfully modifying agency, viz., tonsillary, or pharyngean angina, enlargement of the tonsils, mucous nasal polypi, in-growing nail, scrofulous ulcers, nævus and vascular vegetations, inflammatory affections of the cervix uteri, uterine displacements, cancroid, and open cancer. Upon this last the sulphate seems to exert a special action, operating at once as a caustic, disinfectant, and hæmostatic, while it often relieves the pain better than narcotics, and notably delays the development of cachexia.—*Union Med.*, Nos. 15 and 17.

FOREIGN CORRESPONDENCE.

SWITZERLAND.

Zurich, August 1.

HEALTH-RESORTS OF SWITZERLAND.

The travelling season having now fairly set in, an account of the mineral springs and climatic health-resorts of Switzerland may perhaps be of use to your readers, as many an English Doctor will now be consulted by his patients concerning the choice of such sanatoria. Although Switzerland is small, it contains an abundance of places which may be recommended to invalids and patients; and Dr. Meyer-Ahrens, in his valuable work on this subject, enumerates not less than 150 of them, some of which are of course only of local importance, while others have acquired a European fame.

We may distinguish five classes of these places, viz. springs for drinking, springs for bathing, climatic health-resorts, whey-cures, and hydropathic establishments. To the first class belong Saxon-in-Wallis, St. Moritz, and Tarasp-in-Grison; to the second, Louèche, Ragatz-Pföffers, and Baden; to the third, Interlaken, the lake of Geneva and the Righi; to the fourth, Appenzell; and to the fifth the lakes of Zug and Zurich, etc. It is, however, evident that this classification cannot be strictly carried out, as many springs are used for drinking as well as for bathing, etc. Most health-resorts in this country differ from the German spas by their simplicity and cheapness; for instance, there are many boarding-houses on the Lake of Geneva and the Lake of Lucerne, where board, lodging, whey and milk are to be had for from five to seven francs per diem, while the most expensive places, as Leuk, Ragatz, St. Moritz, etc., baths included, cost eight to ten francs a-day; the board being excellent, and the rooms very good. It is true that there are no parks, no houses of conversation, no gaming-tables, no concerts in the open air, no vaudevilles, and other amusements which German civilisation presents to patients and visitors; but the grand scenery, and the pure Alpine air, amply compensate for this.

On the Lake of Geneva the most frequented health-resorts are Montreux, the Meran of Switzerland, where patients also spend the winter; and many prefer a stay at Clarens, at the entrance of Wallis, Veytaux, Vernet, Bex, etc., to Upper Italy. The places just mentioned are 1100 to 1200 feet above the level of the sea. Charnez, which is only inhabited in summer, is 1900. In summer, whey, and in autumn, grapes, are used; sea-baths may also be had. In Bex and Lavey, brine-baths and muriatic thermal springs are employed. On the Jura, the chief sanatorium is Weissenstein, in the canton of Solothurn, 3900 feet, celebrated for its whey. In the Berner Oberland, Interlaken, 1700 feet, Grindelwald, 3200 feet, and Rosenlaui, 4100 feet, are frequented by the upper classes of society. The highest place is Engstlenalp, on the foot of the Jitlis, 5700 feet above the sea, where there is a lake, green alps, and water-courses; and whey, goats' and cows' milk may be had in rare excellence. On the Lake of Lucerne we have the Righi, 5500, Righi-Staffel, 4800, Righi-Steidegg, 5000, Righi-Kaltbad, 4400, and Weggis, on the foot of the Righi, 1300, where the winter is very mild. Appenzell, 2400, and several places in its neighbourhood, are especially visited by patients suffering from diseases of the chest, many of whom improve very much by a persevering use of whey.

The thermal springs of Ragatz and Pfäffers, in the south-eastern part of the Canton of St. Gallen, are well known, and were lately visited by the Kings of Bavaria and Würtemberg. It was there that the great German philosopher Schelling died some years ago, to whom the King of Bavaria has erected a monument; and on July 25 last, the death of Dr. Furrer, one of the first statesmen of Switzerland, took place there. The water of these springs is nearly as pure as distilled water, it has a temperature of 100° F., and marked beneficial effects. It never produces any excitement, and is often useful when other baths and springs have proved injurious. Whether its effect is to be ascribed to the drawing off of noxious matters from the blood through the skin, or to quieting and gently stirring up the nervous system, is not easy to say, but it is certain that cases of heart disease, anæmia, hysteria, rheumatism, gout, diseases of the brain and spinal cord, etc., have been very much improved there. The late Professor Vogt, of Berne, to whom your correspondent in that city paid a graceful tribute in your columns some time ago, preferred Ragatz on account of its climate and neighbourhood to the otherwise similar springs of Gastein and Wildbad. He recommends it especially in pure atony, either in childhood or old age, or when caused by derangements of nutrition, or after acute diseases, in paralysis from exhaustion, etc.

Tarasp and Scuols in Lower Engadin (of 4300 feet), situated in a narrow and rocky hollow of the valley of the Inn, has up to the present time only been accessible to the horseman and foot-passenger; but a good road is now in course of construction. Here we are under a Southern sky; the mountains protect the place from cutting winds, and the climate is very mild. On an area of about a square mile there are no less than twenty mineral springs there. Two saline springs which contain carbonates and sulphates, are best known, and the water is often sent to great distances; they were frequently prescribed by Professor Schönlein, of Berlin. There are also springs which contain carbonic acid, iron, alkalies, and sulphur, and eight pure *mofettes*, or carbonic acid gas springs. Chronic catarrh of the stomach, the intestines, and the bladder, abdominal plethora, hæmorrhoids, diseases of the liver, accumulation of fat, are improved and cured there. Professor Lebert, of Breslau, has recently compared these springs to those of Kissingen and Karlsbad.

St. Moritz, in the Upper Engadin, is better known abroad. This is 5600 feet above the sea, and in a purely alpine neighbourhood. Professor Lebert prefers its springs on account of their containing a large amount of iron, carbonates, and free carbonic acid, to those of Pyrmont, Schwalbach, Reinerz, and Cudova. The contrivances for drinking and bathing are better there than in Tarasp. Anæmia and chlorosis, weakness, and nervous diseases generally are suited for them, and patients convalescent from severe diseases, gain greatly in power by their use. It is, however, only during the months of July and August that these springs can be used, as before and after that period the climate is too rough.

GENERAL CORRESPONDENCE.

MEDICAL EVIDENCE.

LETTER FROM DR. SCHOLEFIELD.

[To the Editor of the Medical Times and Gazette.]

SIR,—Seldom has a Medical man to perform a less agreeable duty than when he is required to give evidence, in a court of justice, relative to the sanity or insanity of a prisoner accused of a capital offence.

An atrocious murder has been committed. The counsel for the defence wishes to prove that the criminal is insane. Medical witnesses are brought forward to establish this view. A series of questions are proposed to them on some of the most recondite problems of mental disease. These questions are skilfully selected so as to bring out those points, and those only, which tend to mystify the jury, and, therefore, to facilitate the escape of the prisoner. Under the guidance of such a mode of questioning, the Medical witness developes his views in a crude and unintelligible form; and the public read his evidence, further mutilated by reporters, aghast at the absurd, dangerous, and "crazy," opinions of the Medical profession.

Now, if a Medical man is required to answer, so far as he is able, every question put to him, how can he answer otherwise than in accordance with his observations, and the recorded observations of his professional brethren? It is not his fault, if the question be irrelevant to the case in hand, or if it be artfully contrived so as to elicit a half-truth. It is the duty of the court to complete the answer by extending the questioning. A Medical man would not be allowed to volunteer explanations and reasonings which would make his former admissions useless in defence of the prisoner. If I am asked whether there is such a disease as moral insanity, what must I say? Shall I contradict my own observation, and the observations of the profession? It is put to me as an abstract question, and I give it an abstract answer. It is well established that cases occur in which persons labour under a form of disease that destroys the controlling power of the moral sentiments and feelings. A woman, perfectly sane on every other point, has an unaccountable propensity to cut the throats of her children when she sees a knife. She is horrified at the idea, but is so fully convinced of its power over her, that she earnestly begs that all cutting instruments may be removed from her reach. Another person, without cause known to himself or others, has a strange wish to drown himself when he sees a draw-well. A third has an insane propensity to steal anything that comes in his way. A hundred such instances might be quoted. Now, if asked if such cases have not occurred, what can the Medical man say? He must answer affirmatively, or lie. And if requested to state how such abnormal mental conditions originate,—unless he wisely admit his ignorance,—what explanation more in accordance with what we know of the laws of mind can be given than that, in consequence of some morbid tendency in certain persons to fix the attention upon ideas producing corresponding feelings, these feelings, in consequence of such morbid concentration, become uncontrollable.

If such answers are dangerous, then the questions are dangerous, and ought not to be put. But if put, no Medical man can answer otherwise.

But how are these answers dangerous? Because the questions are designedly incomplete, vague, abstract. The danger consists in applying general propositions to a special case. The counsellor for the prosecution should pursue the questioning. Moral insanity being admitted in the abstract, is the prisoner at the bar morally insane? What evidence can you adduce of such insanity? And how far does the particular form of insanity, if any, under which the prisoner labours, destroy his responsibility? If the questioning were thus continued, the same Medical man who has given evidence hitherto, would continue his evidence in a manner somewhat similar to the following:—

1. The actual is the only limit of the possible in Medical Science. Whatever has once occurred may occur again. However *à priori* improbable the fact may be, if it has once taken place, it is, ever after, within the range of possibility. That a bullet should strike a man's head, pass under the scalp completely round the skull and emerge at the point of entrance, is within the limits of the possible simply because a bullet has been thus sent round a man's head. That homicidal mania may suddenly develope itself is possible, because it has been observed. The "it may be" of science is a definite phrase with a definite meaning. The "it may be" of hypothesis is, that which is possible to the mind. The "it may be" of science is, that which having occurred may therefore occur again. When a Medical man says that such and such things "may be," he is not dealing in vague supposition. He means that whatever has once occurred may occur again.

But, that a thing is scientifically possible, and that this possible thing is present in a certain given case, are two very different propositions. Admitting the proved possibility of moral insanity, it yet remains to be proved that the prisoner is morally insane. There is no more danger in the doctrine of the proved possibility of moral insanity, than there is safety in the proved possibility of a bullet circling a man's brain without harming it. If the admitted possibility of moral insanity is made use of by the counsel for the defence so as to persuade the jury to adopt false conclusions, let the blame fall, not on science, but where it ought to fall.

2. Moral insanity may possibly exist without any evidence of such existence, before some startling crime is committed. But the law cannot recognise such a possibility. The law must have evidence. Moral insanity can seldom be proved by the act for which an accused person is tried. It must be proved by other acts irrespective of the specific act of crime imputed to the prisoner. When Medical evidence asserts that insanity may first show itself in the offence for which a person is on trial for his life, it merely asserts an ascertained possibility,—a possibility, that, standing alone, helps the prisoner in the most infinitesimal degree.

3. Suppose that a Medical witness believes the accused person to be labouring under some form of diseased mind, does it necessarily follow that this particular phase of insanity renders him irresponsible? By no means. I avoid the general subject of imperfect responsibility, and confine myself to one particular form of it,—that in which an uncontrollable impulse arises when its exciting cause is present. The mother before mentioned had no desire to murder her children except when she saw a knife. She knew that murder was a crime; but on seeing a knife an unaccountable feeling took possession of her whole mind, and she felt that if the fearful association of ideas was not broken by removing the weapon beyond her reach, she should plunge it in the throats of her children. When no knife was in sight, she was perfectly responsible for her actions. If she had sought a knife, then, although not responsible when she had it in her possession, she would have been responsible for the crime when committed, because she voluntarily put herself in the way of temptation. She would be in the same state of responsibility to society as the man who commits a crime under the excitement of the voluntary madness produced by drinking. It, moreover, appears that even when she saw a knife, there was an interval of self-control. She was able to resist the feeling, and to flee from the exciting cause. If, knowing her weakness, she had concealed it, never requested the knife to be kept out of her reach, never made any known effort to escape from the demon, then, in the eye of human judgment, she would, on giving way to the impulse, have been guilty of murder; but, if after she had described to her friends the peculiar temptation to which she was exposed, and if all knives had been carefully put out of her reach; and if, unfortunately, when left alone with her children, a knife had by some unforeseen chance been found by her with which she kills her children, in this sequence of events, it appears to me, that we should have a proved instance of a temporary insanity, in which there is evidence also of the absence of legal responsibility.

As a general rule, evidence of insanity may be obtained irrespective of the crime for which a prisoner is tried. Cases certainly occur where the disease is suddenly developed, and the first abnormal manifestation is in a capital offence. In such instances human knowledge is at fault. Hereditary predisposition—absence of all motive, and other collateral circumstances—may, occasionally, render it legally probable that insanity has existed; but, as a general rule, such cases, fortunately rare, cannot be successfully defended.

I have confined myself to one point. I wish to show that

the views of Medical men are very much misrepresented and misunderstood. We are exposed to the taunt of splitting our pedantic hairs in the witness box, instead of upholding the security of society. The fault is in the system. We are called up for the express purpose of splitting hairs and disseeting metaphysieal vapour. It is the system that is to blame. How is the system of taking Medical evidence to be amended? Ought it not to be altered altogether?

I am, &c.

Piekering. W. S. Scholefield, M.D.

MEDICAL NEWS.

University of London.—The following are lists of Candidates who passed the respective Examinations indieated:—

BACHELOR OF MEDICINE.

PRELIMINARY SCIENTIFIC EXAMINATION.—PASS EXAMINATION.

First Division.

Axford, William Henry, King's College
Bruee, Alexander, University College
Carter, William, Charing Cross Hospital
Casey, Edward, King's College
Cass, William Leonard, Guy's Hospital
Clarke, Julius St. Thomas, Guy's Hospital
Deas, Peter Maury, University of Edinburgh
Edis, Frederic Pooley, Westminster Hospital
Gervis, Frederick Heudebourek, St. Thomas's Hospital
Godrich, Henry, B.A. Adjoining St. George's Hospital.
Harries, Gwynne Henry, King's College
Hicks, John Wale, St. Thomas's Hospital
Hinds, James, Queen's College, Birmingham
Hingston, Charles Albert, St. Bartholomew's Hospital
King, Geo ge, London Hospital
Leech, Daniel John, Royal Manchester School of Medicine
Ludlow, Ebenezer, St. Bartholomew's Hospital
Morton, John, St. Thomas's Hospital
Oliver, George, University College
Phillips, John Jones, Guy's Hospital
Pitt, Charles Wightwick, Middlesex Hospital
Powell, Richard Douglas, University College
PyeSmith, Philip Henry, Guy's Hospital
Richards, Frederick William, Winchester Hospital
Rickards, Walter, University College
Smith, William Frank, Guy's Hospital
Stevenson, Thomas, Guy's Hospital
Taylor, Shephard Thomas, King's College
Walker, George Edward, University College
Wesley, John Sebastian, King's College
Wood, John Henry, King's College

Second Division.

Barnes, Edward Charles, St. George's Hospital
Bingley, William Philipps, University College
Brook, Charles, St. Bartholomew's Hospital
Brown, Alfred Gardiner, Guy's Hospital
Browne, Edgar Athelstane, Charing Cross Hospital
Buckmaster, Charles Addams, King's College
Burnard, Charles Frederick, St. Bartholomew's Hospital
Carreg, Griffith Llewelyn, Queen's College, Birmingham
Coathupe, Charles Thomas, Bristol Royal Infirmary
Compson, John Charles, University of Edinburgh
Corbin, Thomas Wilson, St. Bartholomew's Hospital
Dawson, Frederick, London Hospital
Eccles, George Henry, St. Bartholomew's Hospital
Ferris, John Spencer, King's College
Fox, Edward Lloyd Harries, University College
Gwyther, James, Owens College
Jackson, Thomas Creswick, King's College
Makens, John, Guy's Hospital
Marsh, Fre erick Howard, St. Bartholomew's Hospital
Mickley, Arthur George, Guy's Hospital
Norton, Arthur Treherne, St. Mary's Hospital
Nunneley, John Albert, Leeds School of Medicine
Rawlins, William Peter, University College
Rogers, William Moon, University College
Southam, George Thomas Mitchell, St. Bartholomew's Hospital
Squarey, Charles Edward, University College
Thorne, Richard Thorne, St. Bartholomew's Hospital
Waters, John Mangin, University College
Wearne, Vivian, St. George's Hospital

EXAMINATION FOR HONOURS.

Chemistry and Natural Philosophy.

Bruce, Alexander, University College (*Exhibition*)
Deas, Peter Maury, University of Edinburgh } (*Equal*)
Hicks, John Wale, St. Thomas's Hospital }
Godrich, Henry, B.A. Adjoining St. George's Hospital
Casey, Edward, King's College
Wood, John Henry, King's College
Carter, William, Charing Cross Hospital
Harries, Gwynne Henry, King's College

Biology.

Deas, Peter Maury, University of Edinburgh } (*Equal and Exhib.*)
Hicks, John Wale, St. Thomas's Hospital }
Carter, William, Charing Cross Hospital } (*Equal*)
Hinds, James, Queen's College, Birmingham }

FIRST M.B. EXAMINATION.—1861.

PASS EXAMINATION.

First Division.

Axford, William Henry, King's College
Clarke, Julius St. Thomas, Guy's Hospital
Fox, Edward Lloyd Harries, University College
Gwyther, J., B.A., Royal Manch. School of Med. & Owen's College
(a) Money, Frederick John, St. Thomas's Hospital
PyeSmith, Philip Henry, B.A, Guy's Hospital
Rickards, Walter, University College
Smith, William Frank, Guy's Hospital
Stevenson, Thomas, Guy's Hospital
Walker, George Edward, University, College
(b) Waters, John Mangin, University College.

Second Division.

Brook, Charles, St. Bartholomew's Hospital
Ludlow, Ebenezer, St. Bartholomew's Hospital
Makens, John, Guy's Hospital
(b) Southam, George Thos. Mitchell, St. Bartholomew's Hospital.

EXAMINATION FOR HONOURS.

Anatomy.

Clarke, J. St. Thomas, Guy's Hospital (*Exhibition and Gold Medal*)
Stevenson, Thomas, Guy's Hospital (*Gold Medal*)
Walker, George Edward, University College.
Rickards, Walter, University College
Axford, William Henry, King's College
PyeSmith, Philip Henry, B.A., Guy's Hospital } (*Equal*)
Smith, William Frank, Guy's Hospital }

Physiology, Histology, and Comparative Anatomy.

PyeSmith, Ph. H., B.A., Guy's Hospital (*Exhibition & Gold Medal*)
Clarke, Julius St. Thomas, Guy's Hospital (*Gold Medal*)
Stevenson, Thomas, Guy's Hospital.
Smith, William Frank, Guy's Hospital
Rickards, Walter, University College

Materia Medica and Pharmacy, and Chemistry in Relation to Physiology, Pharmacy and Toxicology.

Stevenson, Thomas, Guy's Hospital (*Exhibition and Gold Medal*)
Fox, Edward Lloyd Harries, University College (*Gold Medal*)
Clarke, Julius St Thomas, Guy's Hospital
PyeSmith, Philip Henry, B.A., Guy's Hospital
Walker, George Edward, University College
Rickards, Walter, University College

(a) Examined in Physiology and Chemical Toxicology only.
(b) Examined in Anatomy, Materia Medica, and Applied Chemistry only.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Seienee and Practiee of Medicine, and received Certificates to Praetise on Thursday, August 22, 1861:—

Cresswell, Nathaniel Engleheart, Canterbury
Finch, Henry, Newnham Crofts, Cambridge.

The under-mentioned gentleman also on the same day passed his First Examination:—

Boulton, Albert E., King's College.

Royal College of Surgeons.—The Museum and Library of this Institution will be elosed during September.

Royal College of Surgeons, Edinburgh.—The next Preliminary Examination in general education of eandidates for the Diploma of this College will be held on Saturday, October 26. The next Primary Professional Examination (which will embrace anatomy, physiology, and chemistry) will be held on Wednesday, November 6; and the next Second Professional Examination (surgery and surgieal anatomy, medicine, midwifery, materia mediea, and medieal jurisprudence) immediately after the eonelusion of the Primary Professional Examination.

Value of Vaccination.—Dr. Polak (who has been long resident in Persia) recently observed at the Vienna Medical Soeiety, that the true value of vaeeination can only be properly appreciated by observations made where it is little resorted to. Thus, in Persia, where hitherto the prinees have alone availed themselves of the boon, one-half of the children born, especially in towns, die from small-pox; and the vast number of blind met with in that eountry, have usually aseribed their loss of vision to the same eause.

National Association for the Promotion of Social Science.—The following is the portion of the Report from the Counеil, read by Mr. Hastings, the General Secretary, at the eoncluding meeting of the Dublin Congress, whieh refers to the proeeedings of the Public Health Department:—"Twenty-four papers were read in this seetion, several of which were on subjects eonnected with the public health of Ireland; but the absenee of any general registra-

tion of deaths in Ireland rendered it impossible to come to any definite conclusion with regard to the causes of death, and the best means of their removal. The attention of this section was especially drawn to the state of health of the mercantile navy, and the deficiency of any existing means for ascertaining the amount of disease and death of sailors in merchant ships, and which there is reason to believe is much greater than amongst the population of the same sex and age engaged in various occupations on shore. The following resolutions were passed :—'That the Public Health Section call the attention of the Council of the Association to Dr. Richardson's paper on the Registration of Disease, with the view of considering whether any and what means can be taken by the Association to forward the views enunciated in Dr. Richardson's paper. II. That the Public Health Section request the Council to consider whether, during the ensuing session of Parliament, a Bill might not be passed to make vaccination compulsory in Ireland. III. That the existing state of quarantine legislation and practice in most countries is liable to many grave objections, and often occasions unnecessary impediments to international and commercial intercourse, without affording any adequate protection to the public health ; and that therefore the subject is one which deserves the attention of Government, and calls for further investigation. IV. That it is highly desirable that an accurate report of all proceedings taken in respect of quarantine in the ports of the United Kingdom, and also of all official communications received by the Government relating to quarantine in foreign and colonial ports, should be annually submitted to the Legislature. That the section, in considering the various questions connected with the public health of Ireland, feels that no satisfactory information can be obtained on the subject of the mortality of the population and the prevalence of disease, and great difficulties must be experienced in attempting to diminish them, in the absence of a national system of registration, and recommended to the Council of the Association the consideration of the best way in which the Association can assist in obtaining an Act for the Registration of Births and Deaths in Ireland.' ''

JARDIN DES PLANTES.—A triumph in the art of taxidermy has just been achieved in the Zoological Gallery, by the able display of the remains of the celebrated African elephant, which had been living for nearly thirty years in the Jardin. At the time of its death the elephant weighed 4000 kilogrammes, and as of this weight the skin alone constituted 300 kilogrammes, the difficulties which had to be overcome in displaying this thick and rugous integument, so as to give it the exact form and appearance of that of the living animal, must have been very great.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 42, 1861.

BIRTHS.

Births of Boys, 909; Girls, 844 ; Total, 1753.
Average of 10 corresponding weeks, 1851–60, 1581 6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	598	561	1159
Average of the ten years 1851-60	581·7	574 3	1156 0
Average corrected to increased population..	..	..	1178
Deaths of people above 90	..	..	4
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	6	5	..	9	2	26
North ..	618,201	1	2	10	3	10	9	39
Central ..	378,058	..	..	5	3	7	4	15
East	571,129	1	3	10	2	3	7	34
South ..	773,160	2	4	11	4	11	6	53
Total.. ..	2,803,921	4	15	41	12	40	28	167

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

We have stated before that a Homœopathic Practitioner, whose "career" was noticed in our Journal of the 10th instant, is not a member of the *University* of Glasgow, but of the *Faculty of Physician and Surgeons* of that City.

The proof of Mr. Solomon's Paper has not been received.

Replies to several Correspondents are accidentally delayed until next week.

COMMUNICATIONS have been received from :—

Rev. A. J. D'ORSEY, B.D. ; "AN OLD SUBSCRIBER ;" Mr. H. CRUTCHLEY ; Mr. J. LISTER ; Dr. KIDD ; Mr. J. BRUCE ; Mr. J. D. JEFFERY ; Dr. J. WOOD ; "M.D. but not F.R.C.S. ;" Mr. J. RHODES ; and our Correspondents in Ireland and at Zurich.

APPOINTMENTS FOR THE WEEK.

August 31. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m. ; St. Thomas's, 1 p.m. ; King's, 2 p.m. ; Charing-cross, 1 p.m.

September 2. *Monday.*

Operations at the Royal Free Hospital, 1 p.m. ; Metropolitan Free Hospital, 2 p.m.

3. *Tuesday.*

Operations at Guy's, 1 p.m. ; Westminster, 2 p.m.

4. *Wednesday.*

Operations at University College Hospital, 2 p.m. ; St. Mary's, 1 p.m. ; Orthopædic Hospital, 2 p.m. ; Middlesex, 1 p.m.

5. *Thursday.*

Operations at St. George's, 1 p.m. ; Central London Ophthalmic, 1 p.m. London, 1½ p.m. ; Great Northern, 2 p.m. ; Surgical Home, 2 p.m.

6. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday next :—

By Mr. Wood—Removal of Fatty Tumour from Shoulder ; Antiplastic Operation on Lower Lip ; Division of Stricture of Urethra ; Club-foot.
By Mr. Hulke—Removal of Tumour from Breast.

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F. WALTERS having originally invented these Urinals, begs to warn the Profession of the many bad and useless imitations which are now sold, and he would advise them, before purchasing, to look that they are stamped with his name; as, unless that be the case, he cannot guarantee them.

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ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT

The Grosvenor Place School of Medicine,

IN THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.

Surgeon to the Royal Orthopædic and Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital, &c.

Lecture I.

(Concluded from page 213.)

Healthy Anatomy and Physiology of the Spine.

It is not my intention to enter into any detailed anatomical description of the spinal column, as with this portion of our subject you are, doubtless, sufficiently familiar; but a careful study of its mechanism and physiology is so essential to a right understanding of the causes and mode of production of the various deviations and deformities to which the spine is liable, and so essential is this knowledge to the establishment of correct and scientific principles of treatment, that I will endeavour to pass in review as briefly as possible the salient points in the anatomical construction and mechanism of the spinal column, which it appears to me necessary to have steadily impressed upon the mind whilst endeavouring to analyse the distortions of which I propose to treat.

Healthy Anatomy.

Anatomical and Mechanical Construction of the Spinal Column.—The moveable portion of the spinal column, above the sacrum, is composed of twenty-four vertebræ, the bodies of which, except the two first bones, are separated from each other by the intervertebral fibro-cartilages, through the medium of which it may also be said that the bodies of the vertebræ indirectly articulate with each other; but the bones are directly connected only by the oblique articular processes, the situation of which, posterior to the bodies and to the spinal canal, it is important to bear in mind, as we shall see that in various movements of the body in which the spine is bent sideways, the weight is thrown upon these articular processes, which are therefore liable to yield and become altered in form in the earliest stage of distortion of the spine. In the erect position of the body the weight is directly transmitted through the bodies of the vertebræ and the intervertebral cartilages, which, including that between the last lumbar vertebra and the sacrum, are twenty-three in number.

Relative Proportions of Intervertebral Cartilage and Bone in the Length of the Spinal Column.—It is unnecessary for me to describe anatomically the intervertebral cartilages which you know are composed, towards their circumference, of thin plates of fibro-cartilage arranged concentrically, and in their central portions contain a soft, gelatinous-looking material. I need hardly remind you that it is upon the existence of this intervertebral substance that the elasticity and flexibility of the spine essentially depend; and as it is in this tissue that some of the earliest structural changes in spinal curvature take place, let us observe particularly how largely it enters into and composes the length of the spinal column.

The average length of the adult spinal column, including the sacrum and coccyx, is stated by Professors Quain and Sharpey (a) to be "about two feet two or three inches;" and in reference to the relative proportions of bone and cartilage, the same authorities also state (page 189), that, "excluding from consideration the first two vertebræ, between which it does not exist, the intervertebral tissue forms in length about a fourth of the moveable part of the column."

(a) "Elements of Anatomy," Fifth Edition, 1843, page 18.

The brothers W. and E. Weber,(b) whose accurate investigations of the mechanism of motion at the various articulations of the human body have so largely contributed to our knowledge of this subject, carefully preserved the form of a spine by filling the cavities of the chest and abdomen with plaster of Paris, and then bisecting it in the median plane. A reduced drawing of this spine has been published by Mr. Bishop,(c) who has with great care investigated the mechanical construction of the spine, as well as the mechanical conditions under which its deformities are produced, and I shall have frequent occasion to allude to his investigations.

The exact relative proportion of cartilage and bone in this specimen, reduced to inches—a calculation which Mr. Bishop was kind enough to make for me—was,

Cartilage	3·8760165 inches.
Bone	17·6809075 ,,

In round numbers, then, according to the Messrs. Weber's calculations, we may say, that if the moveable portion of the spinal column, *i. e.* from the sacrum to the atlas in which the intervertebral cartilages are contained, measures 22 inches, rather less than one-fifth of this length consists of soft elastic intervertebral cartilage.

My former colleague Mr. Pittard, lately one of the anatomical teachers of this School, has been kind enough to make for me a longitudinal section of a spinal column in its recent state, and to measure very accurately the thickness of the bones and intervertebral cartilages. The following are the measurements in the spine. The height of the subject, a male, was five feet ten and a half inches:—

	Inches.
Total length of the spine above the sacrum (the measurement following the curves along the centres of the bones and cartilages.)	23·6
Total length of the spine in a straight line, taken by a cord strained from the upper edge of the sacrum to the summit of the atlas.	23·1
Sum total of the thickness of the twenty-three intervertebral cartilages between the sacrum and the axis, measured through their centres.	5·9
Sum total of the thickness of the bodies of the twenty-four vertebræ, at their centres.	17·7

In this specimen you will perceive that the relative proportion of the intervertebral cartilage to the bone was greater than existed in the specimen measured by M. Weber. Of course, a large number of spinal columns ought to be examined before any general statement can be made, but it would probably be correct to assume that about one-fourth, or between a fourth and a fifth of the length of the spinal column, above the sacrum, is composed of elastic intervertebral cartilage, and it is very important for us to bear this in mind in reference both to the production and treatment of spinal curvature.

Compressibility of the Intervertebral Cartilage.—The effect of equal and unequal pressure upon this quantity of intervertebral cartilage is a point of the highest interest in reference to the mode of production of spinal curvature, and will be hereafter considered. I will now merely advert to the fact that under the influence of equal pressure in the erect position of the body, this intervertebral substance becomes compressed, so that during the day the body diminishes in height. Mr. Bishop(d) observes, "When the trunk has been kept in the erect posture during the day, an adult man, of middle stature, loses about one inch of his height, which he does not regain until after having remained some hours in a recumbent position." The fact of variation in the height between morning and evening is well known to the recruiting serjeant, who measures his men in the morning. I have myself submitted the above statement to the test of experiment by means of an ingeniously constructed self-registering sliding measure, easily fixed to a door or any woodwork in a bed-room, which was made for me by a young gentleman at Eton, himself the subject of spinal curvature. By this contrivance he induced several of his school-fellows to register their heights night and morning, and I have also obtained numerous observations of the same kind, from which it appears that the average loss in

(b) "Mechanik der Menschlichen Gehuerkzenge." Göttingen: 1836.

(c) "On the Pathology and Treatment of Deformities." Highley: 1852. Page 23.

(d) *Op. cit.* page 37.

height during the day in young and growing persons, as well as adults, varies between half and three-quarters of an inch. It is sometimes a little above this, but I have not ascertained it to be a full inch in any instance. There can be no doubt that this diminution in height is entirely due to the compressibility of the soft intervertebral substance; it is not probable that the thin layers of dense articular cartilage in the hip, knee, and ankle-joints, would suffer from compression, especially when we consider the rest which they obtain in the varied positions of the body during the day.

Average Length of the Spine as Compared with the Height of the Individual.—From a careful measurement of fourteen adult skeletons in the Royal College of Surgeons, including the skeletons of the Irish and American giants, and the Sicilian dwarf, as well as those from the Bushmen, Negro, Polynesian, and Australian races, I have found that the average length of the spine—*i. e.*, taking its vertical height from the top of the atlas to the upper surface of the sacrum—forms as nearly as possible one-third of the total height of the skeleton. In seven instances this relative proportion is exact; in five, the spine is half-an-inch in excess; in one, an inch in excess; and in one half-an inch less. When the measurement is taken along the anterior surfaces of the bodies of the vertebræ, the curved form of the spine generally gives from one to two inches more in excess of the one-third taken as the vertical height. The spine, therefore, varies in length, according to the height of the individual, with great regularity, always maintaining, in well-proportioned individuals, the relative proportion of one-third to the total height of the skeleton.

In external measurements of the body, when its proper relative proportions are required, for artistic purposes, the anterior superior spinous process of the ilium may be assumed as corresponding with the upper surface of the sacrum, and, therefore, from this point to the base of the skull—and the floor of the meatus of the ear may be assumed as corresponding to the base of the skull—would be, as nearly as possible, one-third of the total height of the body.

This regular variation in the length of the spine in proportion to the height of the individual—the relative proportion remaining as one-third—is quite consistent with the popular observation so generally made, that the difference in height between tall and short people depends much more upon the length of the legs than the spine, obviously because the spine forms only one third of the total height of the individual; hence, the difference in height is noticed much less in sitting than in the standing position. But this observation appears to have led some authors erroneously to think that whatever may be the height of different individuals, the spine in all remains about the same length.

With regard to *the relative proportions of the trunk and the lower extremities in dwarfs and giants, as well as in short and tall individuals*, there can be no doubt that considerable variations often exist, though not shown to the extent generally supposed, by the measurements of the skeletons above referred to; but it by no means necessarily follows, as has been assumed by Mr. A. Shaw,(e) that in dwarfs, as a rule, there is a disproportionate shortness of the legs, and that "the proportions of the dwarf, therefore, correspond with those of the individual affected with rickets," or that, in consequence of a disproportionate leg development, "the tall individual becomes a true caricature of the mature form." The measurements of fourteen skeletons above quoted, as well as our daily experience, teach us that well-proportioned tall and short people—as well, also, as their extremes, giants and dwarfs—are by no means uncommon, though I am not prepared to deny that tall people often exhibit a disproportionate length of legs, and short people a disproportionate shortness of the legs; and to some extent these deviations exist, perhaps, in the majority of cases, but the statement has been made much too broadly. Moreover, in short people who exhibit this disproportionate shortness of the legs—and a long body and short-legged appearance is very common in short people in this country—I believe we may generally trace this peculiarity of conformation, wide spread as the evil may be, to a tendency to rickets exhibited during the active period of growth and ossification in infancy and childhood, and generally traceable to imperfect lactation, upon which, I believe, rickets more frequently depends than upon any constitutional defect from birth or hereditary taint. In such individuals, in addition to the shortness of the legs, other well-known characters of the rachitic skeleton often exist in a marked degree, and are evidenced by the peculiar form of the skull and features, as well as the large size of the epiphyses of the long bones, the form of the hands and feet, etc., and without doubt these characters generally exist with sufficient distinctness to enable us to trace the rachitic tendency as a cause of the dwarfishness.

Some explanation of this defect in the relative proportions of the trunk and lower extremities in the rickety skeleton will be found in the valuable paper by Mr. A. Shaw, "On the Conformation of the Skeleton in Rickets," previously referred to. By a comparison of the rachitic conformation with the relative proportions of the figure during growth, from fœtal and infantile life to adult age, which Mr. Shaw has given in a tabulated form, it appears that the disproportionate shortness of the legs, which is one of the most marked peculiarities of the rickety skeleton, may be regarded as a persistent conformation of the skeleton in fœtal and infantile life produced by the influence which rickets has in retarding the growth of the entire skeleton; and that the arrest of growth being more strikingly exhibited in the lower extremities, is to be accounted for by the fact that naturally the process of development is more active in the lower extremities than in the superior division of the body, after birth; so that when the child becomes the subject of rickets, instead of the legs gaining in length at their natural rate, they grow only at the slow rate of the rest of the body.

I have perhaps digressed too far, but there is a practical as well as scientific interest in these views which I felt desirous of bringing under your notice.

Pyramidal Form of Spine.—The spinal column, thus constituted in its length of bone and intervertebral cartilage, presents when viewed anteriorly a pyramidal form, the expanded base of which rests upon the upper surface of the sacrum. When the sacrum and coccyx are considered as portions of the spinal column, the form of the latter is properly described as consisting of two pyramids with their bases meeting at the junction of the sacrum with the last lumbar vertebra; however, when speaking of the spine for Surgical purposes we include only the true vertebræ above the sacrum. The pyramidal form of the spinal column is rendered slightly irregular, by a little narrowing laterally in the upper dorsal region, but still, as Mr. Bishop (f) observes from MM. Weber's calculations, "the areas of the articulating surfaces of the bodies increase from the second cervical to the last lumbar vertebra, so that the surfaces of the bones increase as the weight they have to sustain augments," and the mean diameter of the intervertebral cartilages, which I presume would correspond to the mean diameters of the bodies of the vertebræ in the same regions, is stated to be as follows (g):—

Cervical = 15·0
Dorsal = 25·3
Lumbar = 28·0

I need hardly observe that the pyramidal form is mechanically that which most securely provides for the stability of the spinal column in the erect position.

Normal Curves of the Spine.—Antero-posterior Curves.—The spinal column, including the sacrum, when viewed in profile, presents four curves directed alternately forwards and backwards corresponding to the outline of the body which it determines. In the neck and loins the convexity is directed forwards, and in the back and pelvis it is in the opposite direction. The dorsal curve increases the capacity of the chest, and the lumbar curve is necessary to bring the thorax more directly over the base of support. It is not, however, for me to dilate upon the physiological advantages of the curved form of the spine, but in reference to the mechanical advantages or disadvantages of this curved form, I think there can be no doubt of the accuracy of Mr. Bishop's observation—in opposition to the statement of Rollin and Majendie, who, he tells us, considered the spine in its curved form to be sixteen times stronger than if it were straight—that "so far from being stronger in consequence of being originally bent into several curves, the spine is, in fact, much weaker, and

(e) "On the Conformation of the Skeleton in Rickets," in the Medical and Chirurgical *Transactions*, vol. xvii., p. 457. London: 1832.

(f) *Op. cit.* p. 36.

(g) *Op. cit.* p. 34.

the greater the radius of curvature at any point of the axis, the less will be the strength" (h). Mr. Bishop also shows that the sixth and seventh dorsal vertebræ, which are the most remote from the vertical line which passes nearly through the axis of the occipito-atloid and sacro-lumbar joints, must resist a weight placed on the head with the least mechanical advantage, hence "when the spine is mechanically incurvated in the mesial plane, it is so most commonly at this part." This also explains the prominence of two or three of the lower dorsal spinous processes which we frequently observe in growing girls with weak spines, and is too often made the cause of unnecessary alarm, as supposed to indicate a more serious affection.

Mode of Production of Normal Curves.—From the very accurate measurements of MM. Weber, it has been proved that the cervical and lumbar curves are occasioned principally by the unequal heights of the anterior and posterior portions of the intervertebral cartilages, and the dorsal curve chiefly by the wedge-like figure of the bodies of the vertebræ, although, as Mr. Bishop observes, it appears from Weber's table that "the cartilages, as well as the bones, are thicker at the posterior part in the dorsal region" (i).

Existence of Lateral Curves as a Normal Condition?—The existence or non-existence of any lateral deviation of the spine as a normal condition, is a subject of some importance in reference to the production of lateral curvature. Professors Quain and Sharpey state (k)—"A slight degree of lateral curvature is also observable in most cases in the dorsal region, the convexity of which is directed towards the right side. The older anatomists imagined this to be produced by the action of the aorta beating against the left side of the column; but Bichat attributed it to the effect of muscular action" that is, to the excessive use of the right arm. "Béclard has stated that he found in one or two individuals who were known to have been left-handed, the convexity of the lateral curve directed to the left side. A further confirmation of the correctness of this view is afforded by an observation made by Professor Otto (l). In a case in which the aorta arched to the right instead of the left side, he found that the curve of the vertebral column had the usual direction; so that the great vessel was connected to its convexity. It is stated, too, that the right arm was more muscular than the left."

Dr. Little (m) gives the following abstract of the opinion of Bühring on the subject, in connexion with his views explanatory of the origin of lateral curvature from its prototype, a physiological state:—"Bühring (n) confirms the observations of Desruelles, Petrequin, and Hyrtl, that in the healthy and robust, besides the normal antero-posterior curves, a distinct thoracic curve of the spine to the right exists. This is attributed to the spinal column being unequally loaded at the sides in different parts,—on the left, in the dorsal region, by the heart and great blood-vessels, and on the right by the liver. The ordinary dorsal curve in lateral curvature he proposes to term '*cardiac curve*,' and the ordinary lumbar curve, '*hepatic curve*.' Besides the mere effect of relative overloading of the sides of the column, Bühring, remembering the influence exercised during the developmental period by the arteries upon their contiguous parietes, even when bony, is of opinion that the heart and aorta obtain an increase of space by impelling the dorsal vertebræ to the right; whilst the liver and its vessels similarly dispose to the lumbar curve." Dr. Little, in stating his own opinion, adds, that whilst "he is not prepared to deny that a curve requiring a more precise measure of a straight or curved line than the eye can appreciate may exist, the examination of a number of adults and children unaffected with distortion, taken indiscriminately, has satisfied him that no obvious *natural* lateral curves, such as Bülring describes, are present in healthy persons." My own opinion entirely accords with that of Dr. Little, in doubting the existence of lateral curves as a normal condition of the spine, and I venture to offer my opinion in opposition to the high authorities above named, not only from numerous examinations of the living, but from very numerous and careful observations on the dead subject, a better test, inasmuch as in all lateral curvatures of the spine, the deviations of the bodies of the vertebræ are much greater than that of the spinous processes. In the course of my experience in making post-mortem examinations during the twelve years—from 1842 to 1854—in which I filled the office of Demonstrator of Morbid Anatomy at St. Thomas's Hospital, I habitually examined the spine after eviscerating the bodies, and remarked the great rarity instead of the frequency of any lateral deviation. Working in this great field for so long a period, I obtained but very few specimens of spinal curvature for dissection.

I have known this belief in the existence of a slight lateral curvature of the spine as a normal condition, lead to a very unsound opinion in practice: for instance,—about three years ago a young lady was brought to me from France, with a very slight spinal curvature, which had excited the anxieties of an aunt, whose sister had been under my care for a most severe form of lateral curvature. A French Physician had previously been consulted, and he endeavoured to quiet the alarm of the family by assuring them that "a little prominence of the right shoulder always existed in young ladies, and was no more than an ordinary and natural condition, and that the spine, in fact, *ought not* to be quite straight." Fortunately this startling opinion had the effect of increasing the anxiety it was intended to allay. The case was slight, but had everything against it in the constitution and habits of the girl, and only with the utmost care for some years to come will deformity be prevented. I at first tried a combination of lying down and gymnastic exercise, the treatment I always adopt when a case is brought to me at a sufficiently early period, but in this case I have since been obliged to add mechanical support in consequence of a disposition to increase in the curvature, and the case is now progressing very favourably. I would, therefore, caution you against admitting this opinion as to the existence of lateral curves as a normal condition of the spinal column, not merely in consequence of the serious errors in practice to which such a belief might lead, but because I believe it to be essentially unsound, and that it will be satisfactorily disproved by more extended and careful observations.

I have now adverted to such peculiarities in the anatomical construction of the spinal column as have an especial interest in connexion with the subject of Lateral Curvature, and in the next Lecture will consider the mechanism of motion, and the Physiology of the Spine, in relation to the production of Lateral Curvature.

(h) *Op. cit.*, page 24.

(i) *Op. cit.*, page 34.

(k) *Op. cit.*, page 18.

(l) "Seltene Beobachtungen," Th. 2, s. 61. See also "The Anatomy of the Arteries with its Applications to Pathology and Operative Surgery," by R. Quain. Page 19.

(m) "On the Nature and Treatment of Deformities," page 367. London: 1853.

(n) "Die seitliche Rückgrats—Verkrümmung." Von Dr. J. J. Bühring. Berlin: 1851.

ORIGINAL COMMUNICATIONS.

ON REMOVAL OF THE CERVIX UTERI.

By ROBERT GREENHALGH, M.D., M.R.C.P. Lond.
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The safety and desirability of removal of the neck of the uterus in certain abnormal and diseased conditions, may still be regarded as questions *sub judice*. Notwithstanding the success which has attended this operation in the hands of Lisfranc, Hugier, and others,—still, fatal results have ensued, which have made some Practitioners regard this procedure with a reasonable dread. It appears that the two following important questions have yet to be decided:—1st. What are the most suitable cases? and, 2ndly. By what means can the removal be most safely effected? As a small contribution towards the settlement of these points, I beg to submit the following facts to the attention of your readers.

I may mention that a similar case, at which I assisted, with equally satisfactory results, has occurred in the practice of one of my colleagues. Mrs. H. applied at the Samaritan Hospital on March 18 last. She stated that her age was 25, and had been married six years, but had never been pregnant. Her complexion, fair and ruddy, was much pitted by the small-pox. She commenced to menstruate when between 14 and 15 years of age, and always suffered more or less pain about the back and loins a day previous to the appearance of

the discharge, which was free, not clotted, and lasted from four to five days. She has generally enjoyed excellent health. On one occasion, however, about two years and a-half ago, the catamenia continued about eleven weeks, and was attended with great pain; the discharge was bright red, and she is sure "no lumps came away." Before marriage she had no idea that "anything was wrong," but shortly afterwards a "swelling came down," which so interfered with her duties as a wife, and led to such frequent disagreements with her husband, as to induce her to seek my advice. The swelling, at first small, gradually increased to its present size. For the last two years the catamenia have become very scanty, lasting about five days, and always attended with much pain.

A vaginal examination detected the cervix uteri protruding between the labia to the extent of an inch, considerably enlarged, corrugated, but not unduly sensitive to the touch. On passing the finger to the extent of about two inches over the growth, which was clearly an hypertrophied cervix, a line of demarcation was distinctly felt, which appeared to indicate the healthy from the diseased portion. The sound passed easily through the os into the body of the uterus to the extent of five inches and a-half—three inches beyond the normal distance.

On May 17, after a consultation with my colleagues, I proceeded, while the patient was under the influence of chloroform and in the presence of Drs. Savage and Routh, and others, to remove about two inches and a-half of the cervix with the écraseur, which took about half-an-hour, during and after which scarcely a drop of blood was lost. She progressed most satisfactorily for ten days, when the catamenia appeared, and for the first time without pain, somewhat more copious, and lasting a week.

On June 1 the wound of the cervix was healthy and the os uteri pervious: tepid water to be injected into the vagina twice daily.

On the 10th and 17th the nitrate of silver was applied.

On the 25th she again began to menstruate without pain and lasting five days.

On July 11 a careful examination detected the cervix of normal size and structure, the wound having quite healed; the os uteri was pervious and easily admitted the sound to the extent of three inches.

Some time was occupied in adjusting the écraseur, which might have been avoided by transfixing the cervix with a vulsellum and drawing it beyond the vulva, but it was deemed far more judicious to effect its removal while the uterus was *in situ*, a principle I would strongly urge upon those who undertake similar operations upon that organ.

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ON CYSTS WITHIN THE CRURAL CANAL SIMULATING FEMORAL HERNIA.

By CHRISTOPHER HEATH, F.R.C.S.

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Having, within two years, met with two instances of cysts in the femoral region simulating hernia, I think it well to place them upon record, since, so far as I can ascertain, their occurrence is rare.

In the *Medical Times and Gazette* for January 6, 1855, Mr. Quain has recorded "Some Unusual Circumstances met with in Operations for the Relief of Strangulated Hernia," under which heading are narrated two cases of femoral hernia in which a cyst, containing serum, overlay the hernia, and rendered the operation for the relief of the strangulation somewhat complicated. These were the only cases of the kind which Mr. Quain had met with, and he notices the fact that neither Sir Astley Cooper nor Mr. Lawrence makes any mention of this complication, the only other cases being that recorded by Mr. Chevalier (*Medico-Chirurgical Transactions*, Vol. IV.) and those by Breschet from Dupuytren's practice.

In all these instances there was a strangulated hernia, in addition to and behind the cyst, but in the two following cases there was no hernial protrusion at all, the cysts having so closely resembled herniæ, and other collateral circumstances pointing in the same direction, that operations were necessitated for the relief of the supposed strangulation. Mr. Quain, in the paper alluded to, proceeds to discuss the nature of these cysts, and the manner of their production as follows:—"Is the cyst independent of hernia or not? My reply is, that I have not seen any such formation in the same position, independently of hernia; and I am not acquainted with an example recorded by any other Surgeon." The second case here recorded, however, was clearly independent of any hernia at the time of the operation, for after its removal I was enabled to pass my finger up to the femoral ring, which was in a perfectly normal condition. With regard to the method of formation, Mr. Quain comes to the conclusion that the cyst is, in all probability, an old hernial sac, closed at its neck in the femoral canal, and the first of my cases completely confirms that opinion, since but for the accidental complication of the presence of the *appendices epiploicæ*, it would have been a simple cyst, shut off, although not entirely detached, from the peritoneum.

In my second case it must be doubtful whether it was originally connected with the peritoneum or no, although it is quite possible that the pressure of the truss may have produced obliteration and absorption of the narrow neck. If there should have occurred a true femoral hernia in this patient it must necessarily have come down behind and have pushed forward the cyst, and thus have closely resembled the cases mentioned by Mr. Quain.

Case 1.—July 15, 1859.—I was requested by my colleague Dr. Stallard to see an old woman, aged 70, whom he considered to be labouring under strangulated hernia. She had applied for the relief of constipation which had existed for three days accompanied by the vomiting of bilious matter, and Dr. Stallard had enquired as to the existence of a hernia, which was denied, but having discovered a large one on the right side, he handed the case over to me. On visiting the patient I found that the vomiting had ceased, but that the abdomen was much distended, although there was no complaint of pain. On the right side there was a femoral hernia as large as the fist, which was quite flaccid and free from pain. On the left side, however, I found a small and very tense projection through the left femoral ring, which gave some pain when pressed upon, but not otherwise, the patient having been unaware of its previous existence. The hernia on the right side had existed some years, but she had never worn a truss. She seemed a hale old woman, and was with some difficulty persuaded to keep her bed. I made an attempt to reduce the left hernia, but did not succeed. Ordered an enema.

Saw her in the evening, in consultation with Mr. Hulke, and found everything the same, there being no increase of pain or return of vomiting. It was agreed that the symptoms were not urgent enough to warrant an operation. Enema to be repeated.

July 16.—Has brought up a good deal of wind and feels easier: otherwise the same. By applying taxis with some force I was able to reduce the size of the tumor in the left groin about half. The pressure necessary for this gave some pain. Repeat enema.

In the evening she complained of a good deal of pain all over the abdomen, and particularly towards the left groin, and I therefore proceeded to perform an exploratory operation under chloroform. Having made an incision on the inner side of the tumour, I dissected down to it and came upon what appeared to be at first sight a piece of highly-congested intestine, but afterwards proved to be sac. Having divided some fibres of Gimbernat's ligament and broken down a few adhesions, I was enabled to return the hernia apparently within the abdomen. Hardly a drop of blood had been lost and the wound having been stitched up, a pad and bandage were applied in the usual way. ℞ Pil. saponis co. gr. v. 4tis hôris.

July 17.—On visiting her this morning I found the pad and bandages soaked with blood, but as this had coagulated and there was apparently no further bleeding, I did not disturb them. Patient had had a quiet night, no relief by bowels, abdomen still distended but quite free from pain. Pulse feeble. Ordered brandy ʒss. 2ndis hôris.

She became feeble during the day, notwithstanding an increase in the amount of stimulants, and died on the evening of the 18th.

Post-Mortem Examination.—Abdomen very tense. A good

deal of coagulum found within the wound. Intestines enormously distended and congested, and covered with recent lymph in various places; their coats so softened as to give way in two or three places upon being handled. A knuckle of healthy intestine and a quantity of omentum found in the right hernial sac. On the left side the peritoneum was found unopened, and there was no appearance from within of there having been a hernia, the only abnormality being that the rectum descended into the pelvis close to the femoral ring. On stripping down the peritoneum from the wall of the abdomen, we found the mass which had been taken for a hernia lying outside the peritoneum and still strongly resembling a piece of intestine with fæcal contents. On incising it, however, it proved to be a cyst evidently derived from the peritoneum, though now shut off from it, and containing, apparently, a mass of *appendices epiploicæ* derived from the large intestine, the malposition of which was no doubt congenital. On laying open the intestine, a slight puckering of the mucous membrane was visible opposite the attachment of the cyst. There was not the slightest trace of peritonitis near the seat of the operation, and the case must be regarded as one of unrecognised enteritis, complicated by the presence of a tumour in the seat of hernia.

Case 2.—May 29, 1861.—Mrs. R., aged 35, was sent into my room at the St. George's and St. James's Dispensary by Dr. Stallard to have a femoral hernia returned from which she had been suffering for two years, and had been supplied with a truss from the City Truss Society, which instrument, however, was not effectual in keeping the rupture up. She had applied for the relief of debility and sickness, which latter Dr. Stallard thought might be partially dependent upon the rupture. I found a small tense tumour in the right femoral ring, to which I applied the taxis for some minutes without effect. I therefore raised the pelvis and lowered the head, and having kept her in that position for half-an-hour, I was enabled to return the tumour apparently effectually. I advised her to have the truss altered so as to keep the rupture up, and warned her of the dangerous consequences which might ensue if it were neglected.

June 5.—She came again with the tumour present, it having come down, owing to her not being able to procure a new truss. She complained of a good deal of sickness, but had not vomited; bowels had been slightly moved in the morning. I applied the taxis for some time, but failed to make any impression; ordered her to go to bed and have an enema of warm water, and I would see her again in the evening.

I ascertained that eighteen months ago she had applied to the House-Surgeon at the Dispensary to have the rupture returned, and he, failing after a prolonged trial, had sent her to the Middlesex Hospital, where, after an hour's exertion, it had been returned without operation.

9 p.m.—Saw the patient again. State much the same. Tumour very tense. Sickness continued, but no vomiting. Administered chloroform, and applied the taxis unsuccessfully, and therefore proceeded to operate at once. Having made an incision on the inner side of the sac, and having reached Gimbernat's ligament, I divided a few fibres of it without any effect upon the tumour. I proceeded, therefore, to open the sac, but upon dividing the layer, which appeared to be the sac, I found that the contained tumour was too transparent for gut, drew it carefully out, and found it to be translucent and clearly a cyst. I carried the finger to the upper part, to see if it were connected with the bowel, and with the nail tore through the tissues which seemed to form a neck for it, and was thus enabled to isolate and remove it. It was a cyst some two inches long and three quarters of an inch in diameter, constricted in the middle, and containing clear, amber-coloured fluid, having apparently no connexion with the peritoneum or intestine, but distinctly occupying the crural canal. I put in a couple of stitches and applied a bandage.

The patient recovered without a bad symptom, and was transferred to the Physician's care for the sickness, which continued unrelieved. She ceased to wear a truss at all.

The close resemblance to a hernia is obvious from the unanimity of the several Surgeons through whose hands she had passed; and for my own part, I never felt a hernia more distinctly return into the abdomen than on the occasion when I returned this woman's tumour.

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SURGICAL CASES AND OBSERVATIONS.

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CANCER OF THE FACE FOLLOWING EPITHELIAL CANCER OF THE LIP, WHICH HAD BEEN REMOVED, AND RETURNED, FIVE TIMES.

James L., aged 60, a farmer's labourer, a sallow, unhealthy-looking man, was admitted as an out-patient of the Hospital, October 22, 1860, on account of a hard, incompressible swelling, situated under the jaw of the right side, midway between the angle and the symphisis, which had been gradually increasing in size since its first appearance six months ago. It was about the size of a large walnut, perfectly immoveable, without the slightest feeling of fluctuation in its interior, and in every respect resembling an ordinary scirrhous enlargement of the part.

About three years since, he first began to be affected with epithelial cancer of the lower lip, which was removed, it returned, however, some time after in the same situation, and was again removed; it twice again returned and was excised as before, still the disease recurred once more in the situation of the cicatrix, and was extirpated for the last time sixteen months ago, making the fifth time the disease had been removed by operation. After this last excision, there has been no return of the disease in this part, and the patient considered he had got rid of his troublesome complaint, but he observed that from this period his health, which had been tolerably good before, commenced perceptibly to decline, he became weak and trembling in his limbs, and began to waste in flesh, to lose his natural colour, and altogether, as he expresses himself, fell into a different state of health to what he was in before the last operation, and he still feels he is gradually getting weaker.

He now presents all the well-marked appearances of the cancerous cachexia; a small quantity of blood, taken from the neighbourhood of the disease, appeared to have lost all the ordinary characteristics of healthy blood, both in consistency and appearance, being much more watery than in its normal state, and differing much in colour from blood taken from a healthy person, having parted with its natural redness and become of a dirty light-brown tinge. Examined under the microscope, the red particles appeared to have entirely lost their globularity, being broken down, and coalescing in shapeless disintegrated masses over the field of the instrument. He was ordered to take some simple vegetable remedies, and to apply a lotion, containing the hydriodate of potash, warmed to the swelling.

November 10.—The tumour has begun to soften. He is much weaker than on his last visit. To apply an oatmeal poultice twice a-day.

19th.—The patient being too ill to attend at the Hospital, his wife informed me that the tumour had given way a day or two ago, and discharged a large quantity of grumous blood, mixed with a little pus, and had continued running somewhat copiously ever since. His weakness had very much increased since his last visit. Thinking that the continuous discharge might wear him out, or that the broken swelling might speedily assume an ulcerative or fungous condition, and as one of his legs had begun to assume the appearance of commencing anasarca, I requested he might be brought into the Hospital next day. On his arrival I found that the ichorous discharge had greatly diminished, but a considerable diffused hardness remained in the seat of the swelling. He was reduced to a state of great general weakness, and so tottering and trembling in his gait that he could scarcely walk. His pulse was exceedingly weak. He had been living very poorly lately, indeed, ever since the last operation, sixteen months ago, and as his appetite was tolerably good, I ordered him to be put on extra diet, to have a mutton chop for breakfast, and a pint and a-half of porter daily. To take the following mixture: ℞ Infus. chyrittræ conc., ʒvj., succus taraxaci ʒj., aquæ ad ʒxij., M. Ft mist. A wine glassful to be taken twice a-day. Under these means he shortly began to improve, both as respects his general health and the appearance of the tumour, which, under the use of an oatmeal poultice saturated with a weak solution of hydriodate of potash, entirely subsided, leaving only a small opening with a slight serous discharge. He remained in the

Hospital about two months, when, as he expressed himself able to return to his work, he was discharged. His improvement, however, was but of short duration, for at the end of a month from his leaving, I was informed that the small opening mentioned had gradually become enlarged, till it had formed a large, unhealthy-looking, fungated ulcer, extending backwards towards the neck, which frequently bled profusely, and had reduced him to the lowest degree of debility. I have not seen the patient since, as he lived some distance off in the country, but I understand he has since died of his disease.

Remarks.—The most curious part of the foregoing case is, doubtless, the repeated recurrence of the epithelial deposit in the lip, its disappearance from that situation, and its final fixture in the submaxillary gland, where it ultimately proved fatal. I cannot account for the disease thus changing its position, but it is not improbable that, owing to his having been entirely out of work ever since the last operation on the lip, and as he and his wife were obliged to subsist upon a small military pension of 5s. 6d. per week, with no other means of support, the disease had become altered from its comparatively innocent nature at first, to one of confirmed constitutional malignancy. There is nothing in the treatment worthy of observation, except that while he was under my observation in the Hospital the employment of the nutritive diet and tonic means appeared to suspend the progress of the disease which would in some measure coincide with a remark of the patient, which particularly struck me, that during the period of the existence of the disease in the lip, he invariably found that while he was in work, and had opportunities of obtaining a moderate supply of nourishing food, he remained free from the disease after each excision, but when from any circumstance he could get no employment, the disease was after a little time sure to reappear in its old situation.

I have mentioned the peculiar appearances of the blood in this case, because I have noticed that in the more severe forms of malignant cachexia this peculiar condition of the circulating fluid frequently presents itself. I have not generally perceived it in the simpler forms of epithelial disease, but have had several opportunities of observing that, as soon as the disease degenerates into a more malignant form, as indicated by the implication of more important tissues, and the increase of the general cachexia, as in the case which I have described, the blood begins to assume this peculiar broken-down condition. Whether it has any particular pathological significance, I am not prepared to say but I have certainly observed that in some cases where the disease has appeared to have been suspended by tonic remedies and nutritious diet, the blood has seemed, for the time at least, to reassume its natural condition and appearance, but has gone back to its former state as soon as the means have been discontinued, and the patient has been obliged, on his discharge from the Hospital, again to submit himself to the insufficient dietary which usually falls to the lot of poor people out of work, and dependent in many cases upon parish support for their actual subsistence.

THE LONGEVITY OF THE ARMY.—Although General Francis Moore, who died last week, was the senior General in the *Army List*, he was not quite the oldest officer in the service. Sir James Watson occupies that distinguished and venerable position, having donned the King's uniform as far back as the year 1783, a year before Lord Palmerston was born. The senior General now on the list is Sir John Wright Guise, Colonel of the 85th Light Infantry, who became a soldier in 1794; but in length of service he, also, is surpassed not only by Sir James Watson, but by General Cosmo Gordon (1792), General Richard Pigot (1793), Sir Howard Douglas, General Herbert, Sir Edward Blakeney, Lord Seaton, Lord Gough, Sir A. Clifton, and Sir William Gomm, all of whom entered the service before Sir J. W. Guise. Notwithstanding the dangers, wounds, and hardships, undergone by these gallant old gentlemen, they show an amount of longevity which the Church, Bar, or statesmanship can scarcely parallel. It was but last year that we recorded the death of General John Mackenzie, who obtained his first commission as far back as New Year's Day, 1778.—*Army and Navy Gazette.*

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CONDUCTED BY
JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,
AND BY
J. HUGHLINGS JACKSON, M.D.,
Assistant-Physician to the Metropolitan Free Hospital.

ST. BARTHOLOMEW'S HOSPITAL.

HEREDITO-SYPHILITIC STRUMA, WITH NODES—KERATITIS—AND ULCERATION OF THE SKIN.

(Under the care of Mr. STANLEY.)

THE following case affords a good illustration of that form of so-called struma, which is a direct consequence of inherited syphilitic taint. No opportunity has occurred for questioning the boy's parents, but his physiognomy and teeth are so characteristic as to warrant a confident diagnosis:—

George L., aged 11, was admitted into Darker under the care of Mr. Stanley, for unhealthy and chronic ulceration of the leg and neck. He is stunted in growth, and his face seems rather sunken, but the bridge of his nose is not flat. His teeth are very characteristically those of inherited syphilis, and as usual, the upper central incisors are the most typical. He has also a slightly irregular pupil, and the remains of corneitis. He says that he has been ill for two years, and that first of all his eyes were bad. He attended at Moorfields for his eyes, which he says are now well, but as above stated, they remain permanently damaged by the attack. When he left attending for his eyes, *i. e.* about seven or eight months ago, the ulcerations began, and have lasted to the present time. His left tibia presents a general enlargement on its subcutaneous surface, at about the upper third for the distance of an inch. It merges gradually above and below with the rest of the osseous surface. He also has two ulcers, one about an inch and a half in diameter, just below the left knee on the outer side. The edges are livid, slightly everted, and undermined. There is no surrounding blush, the lividity being limited to the edges. The bed of the ulcer presents a series of fleshy masses, on which rests a quantity of thin dirty pus. There is another ulcer just below and to the outer side of the angle of the lower jaw on the left side. It is much smaller but presents the same general characters. He says that he is the eldest of four living children, but four of his brothers and sisters have died.

TUBERCLE IN THE BRAIN, LUNGS, KIDNEYS URETER, AND FALLOPIAN TUBES.

(Under the care of Dr. BURROWS.)

Mary Ann B., a domestic servant, aged 24, was admitted on December 6, under the care of Dr. Burrows. Nine weeks before admission she says that while lifting a heavy weight she "strained herself" at the upper part of the right thigh. She had but very little pain at first, but it gradually increased, shooting down the limb to the foot. There was no swelling of the limb. She had Medical advice, and was in bed for a week, when she felt well again. Exposure to cold and damp brought on the pain again, so that she was unable to walk without pain. For this she was admitted. She was a fairly-nourished woman, of fair complexion, but rather dusky below the eyes. Her expression was natural. The skin was dry and hot, but respiration was tranquil. Pulse 112, small and soft; tongue slightly furred, red at tip and edges; bowels costive; urine free. She complained of pain behind both trochanters, extending at times as high as the loins and halfway down the thighs. She had also pain in the groin, extending downwards in the course of the crural nerve, of a dull, aching character, not much increased by pressure. She had also had pain in the breasts, but this had subsided ten days before her admission. She was subject to headache, but it had been worse lately. It was "dull and darting," and was confined to the top and back of the head. No pain was caused by pressure on the spines of the vertebræ. A hip-bath was ordered, and an opiate at bed-time.

December 7.—Her expression was heavy, and her counte-

nance dusky. She perspired freely after the bath, which had relieved the soreness in her limbs, and she had slept better. She had vomited two or three times, but had no feeling of nausea. Her tongue was furred, and slightly red at the tip and edges. Pulse 100, and small in calibre. Skin hot and perspiring. Her bowels had not been opened since admission. An aperient was ordered.

8th.—She slept well last night, and her bowels were moved by the aperient. Her tongue was more clean. Pulse 108, small, and easily compressible. She has now no acute pain in the limbs while lying quite still. She said that they were sore at the back (over the course of the sciatic nerve), and ached. Since last night she had had pain in the calf of the left leg. It was not tender on pressure.

10th.—Her appearance was improved, and her expression was more cheerful. Her countenance was flushed, and her skin warm and perspiring. She had slept badly, perspired profusely, and felt feverish. She had no pain when she kept quiet, but her limbs felt sore when she moved. There was some tenderness, not acute, on pressure behind the great trochanter. Her eyes often rolled about, or were fixed vacantly for some hours. She talked incoherently. Her tongue was red and singularly coated, and she had no appetite for solids. Her bowels had not been opened since the 8th. Pulse 96, small.

15th.—She still perspired profusely. The pulse was 120. Just below the sternal end of the left clavicle there was feeble breathing heard, with fine crepitation, and there was impaired resonance on percussion. Quinine and cod-liver oil were given. A mutton-chop and wine were also ordered.

17th.—Her face was now pale. Skin warm and not perspiring. Pulse 116, small and soft. Tongue red and irregularly furred. Bowels open. Her appetite was still bad. She had slept better, and her cough was less troublesome. There was no expectoration. Respiration tranquil. There was aching in the limbs, but no actual pain was complained of.

20th.—Her face was still pale. Skin warm and dry. Tongue irregularly furred. The appetite was bad, and the cough was more troublesome. The right limb was painful posteriorily, but the left was better. The breath sounds were coarser, and crepitation was more abundant and less fine below the sternal end of the left clavicle. There was bronchial breathing, prolonged expiration and crepitation at the humeral end of the right clavicle. Percussion was more dull over the left sterno clavicular region.

24th—A quarter of a grain of morphia was ordered to be given at bedtime every night.

January 4.—She now laid supine, her hand crossed over her chest, and was difficult to rouse. Her countenance was dusky, and her eyes almost closed. Respiration hurried, the nostrils dilating with each inspiration. Tongue dry and glazed, some sordes on the lips. Pulse 112, sharp in beat. Her cough was at times troublesome, and she was difficult to rouse.

7th.—At intervals of about half-an-hour she roused up from her usual half comatose condition. She managed to take some nourishment occasionally, and took six ounces of wine daily. Her countenance was more dusky, and her appearance listless. For nearly a fortnight she passed urine and fæces in bed unconsciously. She was at times quite unconscious, not knowing her sister. She complained of great pain at the top of her head.

Autopsy. — Body emaciated, post-mortem rigidity well marked. *Brain:* Scalp not congested; skull-cap thin; superficial vessels of brain gorged with blood, with some minute injection of the smaller ones, especially of those of the left hemisphere. In the situation of the Pacchionian bodies on the left hemisphere were numerous small yellow tubercles in the meshes of the pia mater. On making the usual section of the hemispheres, several small tubercles about the size of hemp-seeds were found in the substance of the brain. One of them was in the gray matter; others entirely in the white. In the cerebellum were numerous large tubercular masses. One of them was nearly three-quarters of an inch in diameter. Similar large masses existed in the pores and in each crus cerebri. In the fissure of Sylvius were a few small tubercles, but nowhere else on the base of the brain. Lungs: Both *lungs* were abundantly studded, both at apex and base, with small yellowish tubercle about the size of large pins' heads. The apex of the right upper lobe was somewhat collapsed and œdematous, and more thickly set with tubercles than the rest of the lungs. The *heart* was healthy. The liver contained no tubercle. The spleen was small, dark, firm, and contained no tubercle. The *kidneys* were thin, and felt flabby. Both in the cortex and the pyramids were large masses, the size of a horse-bean, of tubercle. Some of them were situated quite at the apex of the pyramids, and here there was some ulceration. In one ureter, near the kidney, was a rounded superficial ulcer, the size of a threepenny-piece. There was no ulceration of the urinary bladder. The *uterus* was anti-verted, without adhesions. The Fallopian tubes were swollen out and very tortuous, apparently filled with tubercular matter. There was slight ulceration of Peyer's patches. There was no enlargement of the mesenteric glands.

GUY'S HOSPITAL.

LACERATION OF THE LIVER—DEATH ON THE NINTH DAY—PARTIAL CICATRISATION.

(Under the care of Mr. HILTON.)

A man, aged 29, was admitted on December 6, and died on December 15. He was a Jew, and although young, was a very large, fat man. On the day of admission, a roll of lead fell on his chest and right side, and immediately afterwards he brought up some blood. He had great difficulty of breathing, or rather had a remarkable short and catching inspiration. He lay habitually on the left side. Air entered the right lung, and no fractured rib could be detected. It was thought subsequently that the diaphragm must have been injured, and probably also the liver. He expectorated much mucus in consequence of an old bronchitis. He was so ill at first, and his pulse was so feeble, that it was a question whether he could live many hours, but he continued much in the same condition many days.

Autopsy.—On reflecting the skin, extravasated blood was found in the muscles, especially on the upper part of the chest of the left side, and on removing the sternum, the intercostal muscles were infiltrated, and some blood existed in the chest, and also a little in the anterior mediastinum. The left lung was adherent by old cellular tissue. The right lung was universally adherent by recent lymph, there having been a universal pleurisy in the right side. The surface of the lung was covered by a thin layer of lymph, and there were thicker patches in which a little blood was present. On examining these carefully, it was thought possible that a laceration had existed, although it was difficult to ascertain it positively, from the exudation. There was, however, no extravasation of blood into the lung tissue in any part pointing to any place of injury. The seventh and eighth ribs were fractured just within their angles. The eleventh was also fractured. The ribs on the left side were uninjured. The peritoneum contained about a pint of fluid blood, immediately beneath the liver. No inflammatory products or adhesions, except over the liver. The diaphram was closely adherent to the upper surface of the liver to near its anterior margin. When it was separated a long vertical fissure was seen passing from the back to the front of the organ across the right lobe. This fissure was deeper at the upper part, where the diaphragm covered it, being an inch and a-half deep. Below the spot where the diaphragm touched it the laceration was less deep, and this was already closed by blood and lymph—in fact, undergoing repair. When the liver was squeezed, some yellow bilious fluid exuded from the fissure. On the under surface of the liver another extensive laceration had occurred, but this took a horizontal direction, as if a slice of the organ had been partly removed by a knife. Not only was this thus separated, but the laceration had continued further back, so as to separate the capsule of the organ from the tissue beneath, and thus a bag was formed in which blood and other biliary matter was effused. The laceration extended to the fissure of the liver, and from the presence of bile it was thought that the bile duct might have been wounded, but owing to the coagulated blood around it this was not made out. The diaphragm was not lacerated, although bruised and softened opposite the fissure. On removing the adherent lung the muscle was seen to be

ecchymosed, and in one or two spots softened and containing inflammatory exudation. Kidneys healthy.

FRACTURE OF SKULL—LACERATION OF LIVER—DEATH—AUTOPSY.

(Under the care of Mr. BIRKETT.)

The chief point in the following case is the almost entire absence of symptoms, especially as regards the abdominal lesion :—

A man, aged 45, was admitted on December 13. He died on the following day. He was thrown from his cart, and it was said that the wheel went over his head, but he was intoxicated at the time. On the following day he had apparently recovered, and it was not thought that he had received any severe injury. In the afternoon he was up in bed, and fell back soon after dead.

Autopsy.—Body that of a strong, muscular man. Face much bruised, and ecchymosis of eye-ball. The skull was found fissured through the right temple, and the fracture extended through the wing of the sphenoid and through the right orbital-plate. There was no blood effused in any part, nor was the brain injured. There was about a pint of blood in the peritoneum. The liver was most extensively lacerated in the right lobe, so that a large mass the size of the fist was quite separate. The right kidney was fissured on its surface, and covered with coagulated blood.

THE LONDON HOSPITAL.

EXTENSIVE RUPTURE OF THE LIVER FROM THE RECOIL OF A GUN-STOCK.

(Reported by Mr. E. W. CARTER, House-Surgeon.)

The following case possesses much Surgical and medico-legal importance. We give the narrative as reported by Mr. Carter, the House-Surgeon, under whose care the patient came, and by whom the post-mortem was made.

Paul C. was carried into the Hospital on the evening of June 23, 1861. He was by occupation a pawnbroker's assistant, and was a fine, healthy-looking young man. The account brought with him was, that he was in his bed-room, when an explosion was heard, and on his friends going to ascertain the cause, the windows of the room were found broken; C—— was on the floor, and a broken gun lying near him, which had apparently just been burst. On being asked whether he was much hurt, he answered, "Not very much," and these were, I believe, the only words he uttered. After the accident they brought him at once to the Hospital, and on his way here he vomited. On his arrival here his face, lips, and gums, were quite white and blanched, his eyes were set and the pupils dilated; he was scarcely breathing, and was pulseless. On the ball of his right thumb was a tolerable-sized lacerated wound, and the metacarpal phalanx of the same thumb was fractured. There did not seem to have been much hæmorrhage from the wound. Brandy was given him directly, but about ten minutes after his admission he died. On a careful examination of his mouth and surface of the body, no other wound or bruise could be discovered, till he was about to be removed, when a slight blush was noticed over the right hypochondriac region, and the question was raised, whether it was caused by the pressure exercised in keeping up artificial respiration, which had been practised for a short time.

A post-mortem examination was made. There was no bruise or wound of any sort discoverable on the body, with the exception of the wound of the thumb above mentioned, the redness having disappeared in the right hypochondriac region. The brain was found exceedingly firm and healthy, the lungs and heart were also very healthy, the cavities of the latter being empty. On exposing the contents of the abdomen, the cavity of the peritoneum was found filled with blood in a fluid state and of a dark colour. The liver was found lacerated in several places, one large laceration extending half-way up the right lobe with smaller lacerations on either side. The liver-substance was healthy. The stomach contained a quantity of food undergoing digestion, but no traces of poison. All the other viscera were healthy.

The redness observed just after death would correspond to the seat of the internal injury, and under the tissues, almost within the muscular parietes, was a clot of extravasated blood about the size of a large pea.

Many cases are on record in proof that blows on the abdomen may cause fatal rupture of one or other of the internal viscera without leaving any external evidence of contusion. The work of Casper is, in particular, rich in illustrations of this subject. There can, therefore, be little difficulty in attributing death in the above case to the recoil of the stock of the burst gun. Nor, considering the other facts in evidence, can we feel much doubt that the occurrence was an accident and not suicidal. The case well shows the great importance of a post-mortem examination in all cases of complicated injuries. Had the injury to the hand chanced to have been more severe, and to have been attended by profuse bleeding, it is quite possible that the death might have been supposed to be accounted for by it.

RADCLIFFE INFIRMARY, OXFORD.

FRACTURE OF FEMUR—DEATH WITH TYPHOID SYMPTOMS ON THE SIXTEENTH DAY—AUTOPSY—PHLEBITIS OF FEMORAL VEIN AND PERITONITIS.

(Under the care of Mr. SYMONDS.)

Charlotte W., aged 59, a woman of notoriously intemperate habits, was admitted into Radcliffe Infirmary on August 9, with a simple fracture of the left thigh, at about its lower third, caused by a fall from a ladder some hours previously.

The fractured limb was put up with the common long splint. From the time of her admission, she was in a low, desponding state. On August 15, she had an attack of diarrhœa, which lasted three days, and was treated with haust. aromat. c. opio, brandy, and light, nutritious diet. On August 21, the diarrhœa returned, the abdomen became tense and tympanitic, though not painful; she gradually passed into a low, typhoid state, and died on August 25. The treatment consisted of turpentine fomentations to the abdomen; internally, astringents with opium, ether and ammonia, and as much brandy, beef-tea, etc., as she could be got to take. The last two or three days preceding her death, she passed bloody urine. She never had any rigor, and never once complained of pain, either in the injured limb or in any other part of her body.

Autopsy.—A very oblique comminuted fracture was found, involving about four inches of the lower part of the femur. A tough material, which cut like fibro-cartilage, was thrown out between the fractured ends of the bone, and held them pretty firmly together. Great ecchymosis of the surrounding tissues. The femoral vein showed no trace of any mechanical lesion, but about the middle of its course it was obstructed for some two inches by a fibrous plug, not merely in apposition with, but actually adherent to, its inner coat. Higher up, towards Poupart's ligament, the interior of the vein showed a few patches of inflammatory lymph, but no pus.

There was slight, general, recent peritonitis, fatty degeneration of liver and both kidneys. Bladder contained about a pint of urine, with a large quantity of blood intermixed; its mucous membrane was stained a dark colour. The origin of this blood was obscure, no ulceration or mechanical lesion of any part of the urinary apparatus being found to account for it. Both lungs were emphysematous; all other organs seemed healthy.

ILIAC ABSCESS IMPLICATING THE APPENDIX VERMIFORMIS—DEATH FROM PERITONITIS—AUTOPSY.

(Under the care of Mr. SYMONDS.)

George H., aged 15, a well-nourished, healthy-looking boy, was admitted into the Infirmary on August 10 last, with symptoms of pyrexia, and complaining of great pain in the lower half of the right side of the abdomen. A soft, circumscribed tumour, dull to percussion, could be felt in that region, just under the abdominal wall, reaching forwards as far as the middle line, and upwards to about level with the umbilicus. His own tale, which was confirmed by his mother, was this—that he had always enjoyed robust health up to a month ago, when he had a blow on this part of the belly with the handle of a hay-fork; that he had suffered more or less pain there ever since, and that, for the last four or five days, the pain had become so severe as to confine him to bed. His

bowels had not been constipated, and he had made water regularly.

A catheter was passed to make certain that the bladder was empty. He was kept quiet in bed, and a large poultice applied over the abdomen. August 11.—This evening, at 10 p.m., he was seized with sudden aggravation of the pain, frequent vomiting, and high fever. When seen by the House-Surgeon the abdomen was exquisitely tender; the pain, which had been confined to the one side, had become more general, and the tumour itself could only obscurely be felt. It had evidently become much smaller and less circumscribed. He was ordered a draught containing liquor morphia mxv. acid. hydrocyan. dil. mv., which was repeated about midnight. Warm fomentations to abdomen.

The following morning all the symptoms of acute peritonitis were present. Twelve leeches were applied to the abdomen, and the bites encouraged to bleed afterwards with warm fomentations. He was ordered a grain of solid opium every four hours. The treatment, however, was of no avail beyond easing the pain. He gradually sank, and died on August 16.

Autopsy.—On opening the abdomen, there was no escape of air from its cavity. Stomach and intestines much distended with gas. Traces of acute general peritonitis. The omentum was stretched down over the intestines to the pubes, quite concealing them from view. On trying to reflect it upwards, it was found to be adherent, in the right iliac region, to the abdominal wall in front and the intestines behind. This portion of omentum, when forcibly detached, disclosed to view an ill-defined abscess with ragged, sloughy walls,—involving the free edge of the omentum just mentioned, the appendix vermiformis of the cæcum, a portion of the iliac fascia and of the anterior abdominal wall. There were two or three apertures of communication between this abscess and the general cavity of the peritoneum. No regular abscess-wall could be said to exist; the adhesions, which matted the above parts together, being soft, and very easily ruptured. The greater part of the appendix vermiformis had sloughed away: what remained was thickened and softened, but without obstruction of its central canal. No fæcal matter or foreign body of any kind could be found either in this piece of the appendix, or in the abscess in which it was implicated, or in the remainder of the peritoneal cavity. The caput coli contained a small lump of fæcal matter, but showed no trace of inflammation. The peritoneum contained probably between twenty and thirty ounces of pus, the greater part of which had gravitated into the pelvis.

Remarks.—Abscesses and lesions of the nature just described, we believe, are nearly always the result of fæcal matters or foreign bodies (such as pips, small fruit-stones, etc.) becoming lodged in the appendix, setting up inflammation in it, and finally causing perforation of its coats. In the case just narrated, the exciting cause may possibly have been from without, not from within. The fact of the symptoms dating back to the very day on which the belly was struck with the fork-handle, and the fact that no foreign body could be found in the abscess, seem to us to favour such a supposition. If so, the destruction of the appendix was merely a consequence of the inflammation set up in its neighbourhood. There can be no doubt that the acute symptoms which supervened on the evening of August 11, were due to peritonitis set up by the bursting of the abscess, which up to that time had been circumscribed. The abscess never once showed the least sign of pointing externally.

THE TRUE PHYSICIAN.—To the true Physician there is an inexpressible sanctity in the sick-chamber. At its threshold the more human passions quit their hold on his heart. Love there would be profanation. Even the grief permitted to others he must put aside. He must enter that room—a calm intelligence. He is disabled for his mission if he suffer aught to obscure the keen, quiet, glance of his science. Age, or youth, beauty or deformity, innocence or guilt, merge their distinctions in one common attribute—human suffering appealing to human skill. Woe to the households in which the trusted healer feels not on his conscience the solemn obligations of his glorious art.—*Sir E. B. Lytton, in "A Strange Story."*

Medical Times and Gazette.

SATURDAY, SEPTEMBER 7.

THE REPORT OF THE COUNCIL OF THE BRITISH MEDICAL ASSOCIATION.

IN our Number for July 20 we ventured to inquire, on behalf of the independent and absent members, whether we were to have gossip or business at the forthcoming annual meeting of the British Medical Association. When Sir Charles Hastings moved, at that meeting, that the Report of the Council be received and adopted, he remarked, in reference to our inquiry, he "thought the very best answer that could be made to a certain Editor, who had thought it not beneath his dignity to advance ludierous remarks against the Association, would be found in the Report of the Council, *because that Report not only related what the Association had done and are prepared to do, but also pointed out for it a future path of prosperity and usefulness.*"

Now, before proceeding to consider this best answer to our inquiries, we must take leave to say that we have not "advanced ludicrous remarks against the Association." On the contrary, we are amongst its most sincere and best friends. Our strictures have been directed against the *management* of the Association, as subversive of its dignity and usefulness, and even of its very existence as a Medico-political body. It is the most common thing in the world for men situate like Sir Charles Hastings to confound themselves with the body to which they owe all their importance. The sooner, however, he and others disabuse their minds of this error, the better for their own credit and the Association they represent. It will be remembered that the Journal commenced the year with a style of leading articles which promised to be a disgrace and a curse to the whole Profession, and we therefore suggested an amendment, although we did indulge in a laugh which everybody else enjoyed at the absurdities displayed. The Editor gravely assumed that his newspaper was the sole organ of the Profession in this country, on the ground that it was wholly independent of certain sordid commercial considerations, which, it affirmed, debased its contemporaries and perverted the honest expression of their judgments and opinions. But—as if in direct proof of the ridiculous and untenable position thus assumed—he further proceeded to appeal to the most sordid commercial motives in his canvass for subscriptions to the Association. We supply you a Medical newspaper, he pleaded, for 4¼d. weekly. Do come forward with your cash. The Journal, like the razors of Peter Pindar's razor-seller, was loudly pronounced "for the money quite a heap." A farthing or two a week in the price is a fair commercial reason for inviting additional subscribers to a *journal*, because, commercially, all men like cheap bargains; but this farthing trumpeter was blind to the incongruity of the motive with his own assumptions, and forgot that a farthing a-week saved, was not, in truth, the highest motive to offer for joining an *Association* with such professedly lofty aims. Usually, in these cases, the aims themselves constitute the true motives for action. But further: at the moment this 4¼d. journal vilified its contemporaries as influenced solely by mercenary motives, and assumed to itself the highest honour and integrity, it published, in editorial type and position, in its columns, an attack upon Professor Virchow of Berlin (the most eminent and original of living Continental Pathologists), in which he was represented as the unscrupulous *plagiarist*—and a "Northern Professor" as the eminent *discoverer*—of certain pathological facts. We

called the Editor's attention pointedly to the circumstance that there was a strong opinion current as to the authorship of that one-sided judgment of Virchow—that, from internal evidence, it was suspected the "Northern Professor" had been permitted to be the judge, jury, and executioner in his own case. But a complete silence was held upon that opinion, although it was a charge so highly incriminatory of any journal that the most explicit denial of its accuracy was obviously required. It is true that our strictures on this style of management were good-humoured, for we did not wish to be hard upon our Editorial *confrère*, and were willing to enjoy our laugh; but will any real friend of the Association and of the Journal affirm that they were either mischievous or unjust? Even the most prejudiced will surely agree with us, that the more carefully the Journal avoids such serious faults as we have pointed out (and which were not defended), the more respected, more useful, and more prosperous it will be.

Indeed, any man of common sense could easily deduce our motives from the very nature and tendency of our strictures, since we proposed a line of conduct which, if carried out, can only benefit the body to which we are declared to be hostile; yet, in the face of this obvious fact, those upon whom the management of its affairs has devolved have ventured to trifle so far with the good sense and good feelings of their constituents as to reiterate their imputations of the most sordid motives. It is right, however, that those persons should know the exact position which the writer of those strictures on their proceedings holds in reference to the *Medical Times and Gazette*. We can therefore assure them that he has no pecuniary interest in it whatever,—writes in entire independence of publishers or proprietors,—and (what the Editor of the *British Medical Journal* is *not*) is equally free to blame or praise the management of the Association according as he can show that one or the other is deserved. And if this be not sufficient for Sir Charles Hastings and his staff, we would beg of them to cease at least to befool the members of the Association with their imputations upon our motives (and which imputations, we shall now take leave to affirm, are as base as they are unfounded), inasmuch as the belief in those imputations has a tendency to do the members a serious injury. This is proved by their obvious effect upon Mr. Terry, of Northampton, who sent to us a letter for publication, in which that worthy but simple-minded Surgeon abused us roundly for "attacking" so "respectable" an Association, and glibly imputed to us the low motives for our strictures to which we have referred. Of course, it could only be a suspicion on the part of Mr. Terry, and yet he would not take warning by our refusal to print his ridiculous production, or admit our friendly intimation that he had mistaken our intentions. Miserable that we would not give publicity to his slanders on ourselves, he takes refuge in the more congenial columns of the Journal of the Association, and there the letter is embalmed, a permanent testimony against the writer, and a proof of the ludicrous and false position into which members of the Association are in danger of being led under their leader's guidance.

Having thus cleared away the dust and smoke from the questions really at issue, let us examine the proffered answer to our strictures. *Inter alia*, we affirmed in those so-called "ludicrous remarks," that the organisation of the Civil Medical Service in the United Kingdom is an object well worthy the best efforts of the Association. That service might unquestionably be made available to the systematic cultivation of Medical Topography and Hygiene (which we showed are amongst the professed objects of the body); to the diffusion of sanitary information among all classes of the population; to the more effectual relief of the sick poor; and to the training in a practical school of the rising generation of Practitioners. If the appointments of Officer of Health and Union Medical Officer were made the reward of successful competition, the Civil Medical Service of the United Kingdom would not only become honourable in itself (taking rank, indeed, with the Medical Service of the Army and Navy), but the prospect of entering it by a more honourable portal than the patronage of ignorant Poor-law Guardians, would stimulate the young Practitioner and student to prepare himself for the special examinations of the Service. And, although the candidate might be unsuccessful in attaining his object, a more valuable result would be reached than even success, in a higher professional culture, and thus the general body of Practitioners would rise to a higher level. A well-digested scheme of this kind, would (we are satisfied) be greedily accepted by any Government of the day, no matter of what side in politics, as one of those reforms which would do credit to any. Well, now, in answer to all this what do the Council say they have "done, and are prepared to do," in this matter?

"*Poor-law Medical Reform.*—Your Council are pleased to find that a Select Committee is now sitting in the House of Commons. It is hoped that the inquiries of the Committee will result in recommending alterations in the system of Poor-law Medical Relief, which may prove advantageous to the public, and beneficial to that meritorious and hardly-worked class of our Profession, on which devolves the arduous duties of attending the pauper patients of our country."

We have quoted every word of the Report, bearing on this subject; and we thus learn that a Select Committee of the House is "sitting *in* the House of Commons;" that the Poor-law Medical Officers are "meritorious;" that they are to be pitied as "hardly-worked;" that their "arduous duties" are concerned with "paupers;" that the Council is "pleased to find" out about the Committee; and actually declare "it is hoped" by somebody that something good may come of it. But is this all the Association has "*done and are prepared to do?*" And where is "*the future path of prosperity and usefulness*" in this direction pointed out? Surely this twaddle is a poor substitute for a vote of, say £100, to Mr. Griffin and the "meritorious" in aid of their Parliamentary campaign.

The direct representation of the Profession in Parliament is another of the Medico-political questions on which we said, in our "ludicrous remarks," that the Association might take vigorous action. Two things would be required to secure this, namely, an enlightenment of the public mind in general as to the large social advantages which would accrue from the measure, and a well-conceived scheme to lay before statesmen known to be favourable to it. The first would require an expenditure on public meetings in all the large towns, so as to secure the support of public opinion; and the second would require the collection and arrangement of statistical details and the special devotion of one or two minds to the business. Such a scheme would have abundant chances of success, if wisely and vigorously developed and advocated, and would be well worthy a liberal expenditure from the funds of the Association. It was in vain, however, that at the meeting, Dr. Mackesy advocated immediate and vigorous action on this matter. Even a proposal for a petition to Parliament was shelved, and Sir Charles Hastings had the Report of the Council adopted as follows:—

"*Medical Representation.*—A resolution was passed at the last annual meeting respecting the representation of the Profession in Parliament. Since then, the Royal College of Surgeons in Ireland has adopted a form of petition in favour of such representation. Your Council not having had this important subject brought before it in such a way as to form an opinion upon it, and believing the question is one on which no mere annual resolution will avail, suggests that the subject be referred to the Committee of Council, for such Committee to act as political circumstances may render desirable."

A reader ignorant of the true state of things would infer from the wording of this paragraph that the Irish College of Surgeons had simply followed the lead of the Association; whereas the fact is just the contrary; the College has urged action in this matter upon the Association. And this is the result of the resolution carried at the annual meeting last year; the Council have never even considered how to give it effect, and propose to do nothing more for the future. Such also is the *effete* course of the Council as to all other matters which concern the political position and interests of the Profession. For example:—

"*Medical Legislation.*—A Legislative Committee was appointed at the last annual meeting, and our Council has been informed that the Committee do not present a report this year."

So also with the Committee on Medical Ethics; it is not even named in the Report.

Again; as to more purely Professional matters. The Committee on *Special Hospitals* have not, and cannot, agree on a report, as required by the Association. As to the *Registration of Hospital Patients*, the Council can do, and propose to do, nothing,—except to "recommend" the thing to be done by others. And when Dr. Lankester moved, at a meeting of the Council, that £500 should be granted for scientific researches, his motion was of course negatived. "It might become a practicable thing," Sir C. Hastings observed, "if the condition of the finances continued to improve." Finally, Sir Charles affirmed that, "if the Report [to do nothing] were carried out wisely and zealously, it could not fail to contribute largely to the future prosperity and utility of the Association"!

This, then, is the "best" answer to our inquiries on behalf of the independent members of the Association and the Profession at large. We put the question, Gossip or Business? Sir Charles Hastings declares our questioning "ludicrous," boldly answers "Business!" and refers in proof to the Report of the Council. We examine this Report, and a more complete yet ludicrous proof of do-nothingness it would not be possible to adduce. Poor-law Reform, Representation of the Profession in Parliament, Legislation on Medical Affairs, Medical Ethics, Hospital and Dispensary Reform,—all purely questions of Medical Science requiring co-operation, as Medical Topography, Epidemiology, Hospital Statistics, Physiological Researches,—everything that it is the proper business of the Association to do—wholly neglected. If Sir Charles Hastings will prove that his fine assertions and finer promises apply to any one of these objects—that "a future path of prosperity and usefulness" is pointed out to the Association in the Report as to a single item in this list of *faciendæ*, we will forgive him the rest. As it is, we can only laugh at his audacity of assertion, and wish him more discretion.

But surely *something* has been done, say our readers. We answer: A Journal has been published, and with such success that in the Report of the Council it is actually a matter of the highest congratulation that the Association is not this year in debt, and can afford to offer a few pounds as a "prize" next year! And the expensive bantling has really done something, too, inasmuch as for the last two months it has kept up an incessant snarl at everybody who would not take one prescribed line in combating the Homœopaths—a weak, motley lot, composed pretty equally of knaves and foolish enthusiasts, numbering in about the proportion of seven or eight per thousand of the Profession. The result is, that the poor outcasts are inexpressibly happy at being made so much of, and turn to their dupes and victims with a leer of triumph at their fancied importance—the "British Medical Scold" being of course a high authority with them. The fact is, they "likes to be despised," and would pay handsomely for such abuse as this foolish Journal gives them, rather than not have it.

And now let us see what the Report says as to the moneys of the Association. The Secretary and his Clerk took £145 6s. for their work; district expenses in collecting subscriptions amounted to £21 13s. 7d.; and *the whole of the remainder of* £2038 19s. 6d., derived from the subscriptions (amounting to £1872) was expended on the *Journal* The items of this expenditure are interesting. £28 7s. were paid to "contributors" (how much to the "Northern Professor"?); the publisher got £100; but (happy dogs!) the Editors had for their share of the plunder, FOUR HUNDRED POUNDS, or one-fifth of the entire subscriptions! Seriously, we believe we are much within the estimate when we say that this *Journal* has cost the Members from £20,000 to £30,000.

What, then, in reality under its present management, is the body termed the "British Medical Association"? It *is* plainly nothing more than a Publishing Society, to be classed with the Sydenham, but which *pretends to be* medico-political. Looked at as it really is, what are the results of its labours as compared with those of the Sydenham Society? Looked at as it pretends to be, what are the results of its labours as compared with those of the Registration, Poor-law, and other Associations which have been organized throughout the Profession to do its work? When thus compared, what a beggarly account of its past and its future does that Report of the Council give, to which Sir Charles Hastings referred the independent members we represent, and the Profession at large! Its Council promises eternally, but never performs. It is time this mismanaged body should take up a decided position. Is it to continue a medico-political body? Then let the Council apply its subscriptions to medico-political objects? Does it mean to be a publishing body? Then let the clique that has wasted thousands on the *Journal* take up their position as publishers. But in the interests of the Profession and the public, let them, at the same time, make room for a more active political organisation, that will aim at the attainment of objects for which they have neither the talents, the energy, nor the funds.

The occasion has, indeed, plainly come when the different minor medico-political associations might advantageously combine with a small annual subscription of membership. Many of the Branch Medical Associations would doubtless be ready to combine in such action, however much they might desire to retain their connexion with the parent body as a Publishing Society. If a young and vigorous Association were to apply itself exclusively to a solution of the great medico-political questions of the day, with a determination to do its business in a business-like way, we are satisfied that results of the highest importance, both to the public and to the Profession, would ensue. The state of the public mind and of political parties is such as renders the present time an opportunity exceedingly favourable to the attainment of these objects, and it is one which, once lost, will not soon recur.

THE WEEK.

AMONGST the literary novelties of the day, we notice "The Secret History of the Court of France under Louis XV.," in two volumes, edited by Dr. Challice, well known as a popular Practitioner in Southwark, and one who finds time, amidst the severer duties of his Profession, to take no small share in political affairs. It would seem, from the work before us, that he is equally *au fait* with the politics of France in the last century. While warmly sympathising in the struggles of the French for civil and religious liberty, the author bitterly denounces the scandals against the Court that were invented and circulated in revolutionary times, and accepted implicitly by ourselves. The Marquise de Pompadour is shown to have been in her latter days a self-denying patriot and penitent, and all those gross and obscene orgies attributed

to Louis XV. are proved to be fictions. The story that the King bathed in children's blood is traced to a vulgar outcry against a most politic regulation for seizing vagrant children and educating them for the navy; and the *Parc aux Cerfs*, the alleged scene of the King's licentious orgies, never had any existence save in the imagination of writers who pandered to the mob of the Revolution. There are some notices of the Count de St. German, a mystical personage, who laid claim to eternal youth, and persuaded the Duc de Richelieu to undergo a course of treatment to procure rejuvenescence. "Whether he gave De Richelieu an elixir or golden water of life to drink, it is impossible to say. The only thing certain was a virulent eruption all over the Duke's body, which, under treatment of raw veal, gradually disappeared, left his skin smoother than before, and was supposed, by his renewed youth and beauty, to be the poisonous effects of time that had thus escaped from him." Of course, the attempted murder of the King by Damiens is recorded, with the observation made at the time, that if he had been bled he would not have committed the crime. At the present day he would have been confined as a criminal lunatic, and the great religious and political parties in the State would scarcely have accused each other of suggesting a purposeless crime. The fact that a vindication of Tory and Jacobite politics, and such a white-washing as the character of Louis XV. is capable of, should proceed from a Liberal politician of Southwark, is creditable to Dr. Challice's sense of justice, as well as to his diligent historical research.

Mr. Alcock, M.P., has circulated an ingenious plan for building a bridge across the Thames, which shall be 1000 feet long and 30 wide, and shall be covered in with glass—to have stalls on either side 8 feet square, with a roadway 14 feet clear in the centre. The purpose is, to make the rent of the bazaar-stalls pay the interest and capital expended in the erection: for, as Mr. Alcock ingeniously shows, *land* in London sells for £127,000 per acre; whereas a bridge may be made, and land thereby created, at £100,000 per acre, and the rents of the shops on the bridge would gradually pay both principal and interest. This is very ingenious; but we object, in the first place, to anything that obstructs the free circulation of the air up and down the river in the very centre of London. In the next place, all experience shows that health suffers in bazaars and arcades, and other places of the sort where all the air is breathed at second-hand; and we would rather not encourage 250 new candidates for vacant places in the Consumption Hospital.

The following account of the disputes between the Railway Companies and the authorities of St. Thomas's Hospital, is from the *Times'* City Article of Tuesday:—

"It has excited some remark in the railway world that neither in the report of the Charing-cross Railway nor in the speech of the chairman a few weeks since was any reference made to the course they have been compelled to take as to the important question of St. Thomas's Hospital, which this railway gravely interferes with. It is understood that when the railway was in Parliament, the Governors of St. Thomas's Hospital opposed the Bill in both Houses, showing by the evidence of their Medical officers that if the railway were constructed as proposed, it would destroy the Hospital. Both Houses admitted this view of the case to a considerable extent, and the Lords passed the preamble of the Bill with a resolution to that effect. The authorities of the Hospital also showed by their evidence that a line might be adopted avoiding their establishment altogether. The Act, however, passed, and early in this year the Charing-cross Railway gave notice to take the portion of the Hospital they required. The Governor then called upon the Railway Company to take the whole Hospital. This led to an appeal to the Court of Chancery, when Vice-Chancellor Wood granted an injunction to restrain the taking of the portion required, and compelled the Company to buy the whole. The Company did not appeal against this decision, but applied to the House of Commons for a Bill to enable them to take the portion only. The House of Commons refused to suspend the Standing Orders, and this attempt failed. A few days before the last half-yearly meeting the Railway Company abandoned all further efforts in this direction, and gave notice of their intention to buy the whole Hospital and its appurtenances. The question of value will now, therefore, be determined under the powers of the Lands Clauses Acts, by arbitration, in the usual way. The land occupied by this important public charity is said to be three and a half acres, and, with the buildings, must be of great value. The claim is reported to be, in round figures, nearly half a million. The Hospital will consequently be removed and rebuilt, but at present no site is even suggested. By a clause in the Act no part of the Hospital can be touched for twelve months after the notice is given."

We sincerely hope that this grand opportunity of founding a model suburban Hospital with all the improvements suggested by modern sanitary science, will be taken advantage of. A small town establishment would be amply sufficient for out-patients, accidents, and acute cases; and a railway ambulance would soon convey the great majority of patients to the suburban Institution.

Mr. Glaisher has published an account of the removal of the late Professor Daniell's water barometer from Somerset House to the Crystal Palace. The instrument is fixed in an angle in the Tropical Department, and near the great tree. The top of the column of water can be seen from the first gallery, and, as that which causes a variation of an inch of mercury will cause a variation of more than a foot in the column of water, so the changes in the latter will be more than twelve times as great as in the former. Many oscillations, therefore, may be seen by the water which cannot be seen by the mercurial barometer, and in gales of wind or heavy storms it will be highly interesting to watch its action.

We have received the following account of the sufferers by the late accident admitted into the Sussex County Hospital on August 25:—

Anthony Kean, aged 60, an unhealthy-looking man (a tailor, from London), great laceration of left leg, the tibia much fractured, and in part laid bare, the fracture extending into the knee joint, he had lost a good deal of blood and was brought in in a state of great depression. His limb was removed by Mr. Furner above the knee, very little chloroform was required to procure complete anæsthesia; the femoral artery was a little thickened, not retracting; reaction came on very favourably and he continued in a satisfactory condition till the night of the 26th, from which time he soon passed into a state of coma, and died at 3.45 p.m. on the 27th. There was no secondary hæmorrhage.

William Arnold, a strong, healthy man, compound comminuted fracture of the right leg, amputated below the knee, simple fracture of left leg; doing very well.

Elizabeth Edwing, aged 2½ years (mother killed), fracture of both legs (both bones), and of left thigh, severe scald on right arm and contusion over the body generally; condition much improved—there is now good hope of recovery.

Elizabeth Prescott, fracture of left leg (both bones), scald on right leg (suckling, the infant saved), doing very well.

Elizabeth Prescott, aged 9, slight injuries, (a daughter of the above).

The remainder—Timothy Tester, general contusions and scalds; Thomas Parker (whose wife was killed), wound on forehead; George and Thomas Noble, the former, blow on the forehead; the latter, wound on the right temple,—are doing very well.

The operations were performed by Mr. Furner, the Surgeon of the week, under whose care the above are placed.

Mr. Furner was himself coming in the opposite direction from his house in the country, his train being stopped by the

accident, he was thus enabled by walking over the tunnel to be quickly at the scene of the accident and render assistance to the sufferers.

Dr. Peters, formerly Editor of the *North American Journal of Homœopathy*, author of several works on Homœopathic practice, and "the recognised leader of that School in the United States," has publicly renounced Homœopathy. The following extract from his published recantation may interest our readers:—

"The immense advances which have been made in the regular school in pathological anatomy, diagnosis, microscopical and chemical investigation, in auscultation and percussion, in the use of the speculum and ophthalmoscope, and in the use of ether and chloroform, necessarily force every student of Medicine to give the larger portion of his attention to the publications of the dominant school. I have long endeavoured to force these tangible, practical, and essential advances upon the attention of the Homœopathic school, and laboured almost in vain to convince the fraternity that the Healing Art is so far from having attained a state of perfection that no school has a right wholly to despise and reject the other, and that a wholly derogatory estimation of every other method than their own is not a necessary consequence of their adherence to the latter. Hence, I must prefer the greater to the lesser truth, and however painfully and reluctantly, must endeavour to cast my lot with other friends, other theories, and other practice.

"I never have been a convert to the use of infinitesimal doses; they have been so repugnant to every fraction of common sense which I possess, that I have always felt absolutely degraded when making what I conceived to be necessary trials with them. I have always felt that I was doing something foolish or wrong when giving them; that I was dealing with quantities so minute and so powerless that it would be trifling with the lives of my friends and patients to depend upon them in serious cases, and with their time and comfort in milder attacks. I knew full well that Hahnemann had performed all his first cures with tangible doses, and had cited numerous instances from reliable Medical authorities, in which apparently Homœopathic cures had been effected with not unreasonably small doses. I determined to commence where he commenced, and if beaten back to the use of infinitesimal doses, would reluctantly but at the same time decidedly follow the results of my experience. I have never felt myself obliged to fall back upon infinitesimal doses; but, on the contrary, have been more and more successful in strict proportion as I gradually increased upon the very small quantities which I first used, and in proportion as I departed from a slavish adherence to one system of Medicine. The reports of others, both Physicians and laymen, frequently led me to make careful trials of infinitesimal doses in various cases, but never with satisfactory success; while many extraordinary instances of recovery from distress and sickness in which no medicine had been given, and numerous consultations to which I was called by Homœopathic Physicians, in which severe disease had gone on unchecked by these powerless agents, more and more convinced me that they were irrational and unsafe."

HOMŒOPATHY.

A Letter to J. S. S., Esq. By Sir B. Brodie, Bart.

(From *Fraser's Magazine* for September.)

Dear Sir,—You desire me to give you my opinion of what is called Homœopathy. I can do so without any great labour to myself, and without making any exorbitant demand on your patience, as the question really lies in very small compass, and what I have to say on it may be expressed in very few words.

The subject may be viewed under different aspects. We may inquire, first, whether Homœopathy be, of itself, of any value, or of no value at all? secondly, in what manner does it affect general society? and thirdly, in what relation does it stand to the Medical Profession?

I must first request of you to observe that, whatever I may think at present, I had originally no prejudice either in favour of or against this new system: nor do I believe that the members of the Medical Profession generally were in the first instance influenced by any feelings of this kind. The fact is, that the fault of the Profession for the most part lies in the opposite direction. They are too much inclined to adopt any new theory or any new mode of treatment that may have been proposed; the younger and more inexperienced among them especially erring in this respect, and too frequently indulging themselves in the trial of novelties, disregarding old and established remedies. For myself, I assure you that, whatever opinion I may now hold, it has not been hastily formed. I have made myself sufficiently acquainted with several works which profess to disclose the mysteries of Homœopathy, especially that of Hahnemann, the founder of the Homœopathic sect, and those of Dr. Curie and Mr. Sharpe. The result is, that, with all the pains that I have been able to take, I have been unable to form any very distinct notion of the system which they profess to teach. They all, indeed, begin with laying down, as the foundation of it, the rule that *similia similibus curantur;* or, in plain English, that one disease is to be driven out of the body by artificially creating another disease similar to it. But there the resemblance ends. Hahnemann treats the subject in one way, Dr. Curie in another, and Mr. Sharpe in another way still. General principles are asserted on the evidence of the most doubtful and scanty facts; and the reasoning on them for the most part is thoroughly puerile and illogical. I do not ask you to take all this for granted, but would rather refer you to the books themselves; being satisfied that any one, though he may not be versed in the science of Medicine, who possesses good sense, and who has any knowledge of the caution with which all scientific investigations should be conducted, will arrive at the same conclusion as myself.

But, subordinate to the rule to which I have just referred, there is another, which, by some of the Homœopathic writers, is held to be of great importance, and which is certainly the more remarkable one of the two. The doses of medicine administered by ordinary Practitioners are represented to be very much too large. It is unsafe to have recourse to them, unless reduced to an almost infinitesimal point; not only to the millionth, but sometimes even to the billionth of a grain. Now, observe what this means. Supposing one drop of liquid medicine to be equivalent to one grain, then, in order to obtain the millionth part of that dose, you must dissolve that drop in thirteen gallons of water, and administer only one drop of that solution; while, in order to obtain the billionth of a grain, you must dissolve the aforesaid drop in 217,014 hogsheads of water. Of course, it is plain that this could not practically be accomplished, except by successive dilutions; and this would be a troublesome process. Whether it be at all probable that any one ever undertook to carry it out, I leave you to judge. At any rate, I conceive that there is no reasonable person who would not regard the exhibition of medicine in so diluted a form as being equivalent to no treatment at all.

But however this may be, I may be met by the assertion that there is undoubted evidence that a great number of persons recover from their complaints under Homœopathic treatment, and I do not pretend in the least degree to deny it. In a discourse addressed by myself to the students of St. George's Hospital, in the year 1838, I find the following remarks:—"There is another inquiry which should be always made, before you determine on the adoption of a particular method of treatment; what will happen in this case, if no remedies whatever be employed, if the patient be left altogether to nature, or to the efforts of his own constitution? . . . . . The animal system is not like a clock or a steam-engine, which, being broken, you must send to the clockmaker or engineer to mend it; and which cannot be repaired otherwise. The living machine, unlike the works of human invention, has the power of repairing itself; it contains within itself its own engineer, who, for the most part, requires no more than some very slight assistance at our hands." This truth admits, indeed, of a very large application. If the arts of Medicine and Surgery had never been invented, by far the greater number of those who suffer from bodily illness would have recovered nevertheless. An expe-

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rienced and judicious Medical Practitioner knows this very well; and considers it to be his duty, in the great majority of cases, not so much to interfere by any active treatment, as to take care that nothing should obstruct the natural process of recovery; and to watch lest, in the progress of the case, any new circumstance should arise which would make his active interference necessary. If anyone were to engage in practice, giving his patients nothing but a little distilled water, and enjoining a careful diet, and a prudent mode of life otherwise, a certain number of his patients would perish from the want of further help; but more would recover; and Homœopathic globules are, I doubt not, quite as good as distilled water.

But this does not account for all the success of Homœopathy. In this country there is a large proportion of individuals who have plenty of money, combined with a great lack of employment; and it is astonishing to what an extent such persons contrive to imagine diseases for themselves. There is no animal machine so perfect that there may not at times be some creaking in it. Want of exercise, irregularity as to diet, a little worry of mind—these, and a thousand other causes, may occasion uneasy feelings, to which constant attention and thinking of them will give a reality which they would not have had otherwise; and such feelings will disappear as well under the use of globules as they would under any other mode of treatment, or under no treatment at all.

What I have now mentioned will go far towards explaining the success of Homœopathy. But other circumstances occur every now and then, from which, when they do occur, it profits to a still greater extent. *Humanum est errare.* From the operation of this universal law Medical Practitioners are not exempt, any more than statesmen, divines, lawyers, engineers, or any other profession. There are cases in which there is a greater chance of too much than too little being done for the patient; and if a patient under such circumstances becomes the subject of Homœopathic treatment, this being no treatment at all, he actually derives benefit from the change.

In a discourse to which I have already alluded, I thought it my duty to offer the following caution to my pupils:—"The first question which should present itself to you in the management of a particular case is this: Is the disease one of which the patient may recover, or is it not? There are, indeed, too many cases in which the patient's condition is so manifestly hopeless that the fact cannot be overlooked. Let me, however, caution you that you do not in any instance arrive too hastily at this conclusion. Our knowledge is not so absolute and certain as to prevent even well-informed persons being occasionally mistaken on this point. This is true, especially with respect to the affections of internal organs. Individuals have been restored to health who were supposed to be dying of disease in the lungs or mesenteric glands. . . . It is a good rule in the practice of our art, as in the common affairs of life, for us to look on the favourable side of the question, as far as we can consistently with reason do so." I might have added that hysterical affections are especially a source of error to not very experienced Practitioners, by simulating more serious disease; seeming to resist for a time all the efforts of art, and then all at once subsiding under any kind of treatment, or, just as well, under none at all. Now, if it should so happen that a Medical Practitioner, from want of knowledge, or from a natural defect of judgment, makes a mistake in his diagnosis, and the patient whom he had unsuccessfully treated afterwards recovers under the care of another Practitioner, it is simply said, "Dr. A. was mistaken;" and it is not considered as anything very remarkable that the symptoms should subside while under the care of Dr. B. But if, on the other hand, the recovery takes place under the care of a Homœopathist, or any other empiric, the circumstance excites a much larger portion of attention; and we really cannot very well wonder that, with such knowledge as they possess of these matters, the empiric should gain much credit with the public.

So far the practical result would seem to be that Homœopathy can be productive of no great harm; and, indeed, considering it to be no treatment at all, whenever it is a substitute for bad treatment, it must be the better of the two. But there is great harm nevertheless. There are numerous cases in which spontaneous recovery is out of the question; in which sometimes the life or death of the patient, and at other times the comfort or discomfort of his existence for a long time to come, depends on the prompt application of active and judicious treatment. In such cases Homœopathy is neither more nor less than a mischievous absurdity; and I do not hesitate to say that a very large number of persons have fallen victims to the faith which they reposed in it, and to the consequent delay in having recourse to the use of proper remedies. It is true that it very rarely happens, when any symptoms show themselves which give real alarm to the patient or his friends, that they do not dismiss the Homœopathist and send for a regular Practitioner; but it may well be that by this time the mischief is done, the case being advanced beyond the reach of art.

That the habit of resorting to Homœopathic treatment which has prevailed in some parts of society should have occasioned much dissatisfaction among the mass of Medical Practitioners, is no matter of wonder. It cannot be otherwise than provoking, to those who have passed three or four years of the best part of their lives in endeavouring to make themselves well acquainted with disease, in the wards of an Hospital, to find that there are some among their patients who resort to them for advice only when their complaints have assumed a more painful or dangerous character; while they are set aside in ordinary cases, which involve a smaller amount of anxiety and responsibility, in favour of some Homœopathic Doctor, who, very probably, never studied disease at all. But it cannot be helped. In all times there have been pretenders, who have persuaded a certain part of the public that they have some peculiar knowledge of a royal road to cure, which those of the regular craft have not. It is Homœopathy now; it was something else formerly; and if Homœopathy were to be extinguished, there would be something else in its place. The Medical Profession must be contented to let the thing take its course; and they will best consult their own dignity, and the good of the public, by saying as little as possible about it. The discussions as to the evils of Homœopathy which have sometimes taken place at public meetings, have quite an opposite effect to that which they were intended to produce. They have led some to believe that Homœopathists are rather a persecuted race, and have given to the system which they pursue an importance which it would never have had otherwise; just as any absurd or fanatical sect in religion would gain proselytes if it could only make others believe that it was an object of jealousy and persecution. After all, the harm done to the regular Profession is not so great as many suppose it to be; a very large proportion of the complaints about which Homœopathists are consulted being really no complaints at all, for which a respectable Practitioner would scarcely think it right to prescribe.

There was a time when many of the Medical Profession held the opinion that not only Homœopathy, but all other kinds of quackery, ought to be put down by the strong hand of the law. I imagine that there are very few who hold that opinion now. The fact is, that the thing is impossible; and even if it were possible—as it is plain that the Profession cannot do all that is wanted of them, by curing all kinds of disease and making men immortal—such an interference with the liberty of individuals to consult whom they please would be absurd and wrong. As it now is, the law forbids the employment in any public institution of any one who is not registered as being a qualified Medical Practitioner, after a due examination by some of the constituted authorities; and it can go no further. The only effectual opposition which the Medical Profession can offer to Homœopathy is by individually taking all possible pains to avoid, on their own part, those errors of diagnosis by means of which, more than anything else, the professors of Homœopathy thrive and flourish; by continuing in all ways to act honourably by the public; at the same time, never being induced, either by good nature or by any motives of self-interest, to appear to give their sanction to a system which they know to have no foundation in reality. To join with Homœopathists in attendance on cases of either Medical or Surgical disease would be neither wise nor honest. The object of a Medical consultation is the good of the patient; and we cannot suppose that any such result can arise from the interchange of opinions, where the views entertained, or professed to be entertained, by one of the parties as to the nature and treatment of disease are wholly unintelligible to the other.

I am, dear Sir, yours, &c.

B. C. Brodie.

REVIEWS.

Army Medical Department.—Statistical, Sanitary, and Medical Reports for the Year 1859. Presented to both Houses of Parliament by Command of Her Majesty. Pp. 438. London: 1861.

The Blue Book before us contains the *First* Annual Statistical Report on the Health of the Army. This reads strangely, but it is nevertheless true. And because it is the first, and also on account of its intrinsic value, we propose to review it somewhat at length. Up to the present time, the persistence of the Army authorities in the use of an antiquated nosology has proved a serious impediment to the utilisation of the returns of sickness and mortality. This impediment is now removed; the classification of diseases adopted is that which has received the sanction of the International Statistical Congress, and which is in use at our own General Register Office. From this time forward the mortality of the army will be comparable, year by year, with that of the civil population of the country. We can readily believe the great expenditure of time and labour by which this important alteration has been effected. Our readers will also appreciate it when they consider that in order to permit of a comparison between the sickness and mortality of 1859 and those of previous years the tables for those years, constructed upon the old classification, had all to be re-cast.

The contents of the volume are threefold. There is, first, a Statistical Report on the Health of the Army, by Dr. Balfour. It relates to the health of the troops serving in the United Kingdom, the Mediterranean, British America, Newfoundland, British Columbia, the West Indies, Western Africa, St. Helena, the Cape of Good Hope, the Mauritius, Ceylon, Australia, and China. The omission of India results from the arrears of work arising out of the Mutiny, which was not finally put down till early in 1859. We shall confine our own observations on this part of the volume to the section which relates to the health of the troops serving at home.

The following table, which we extract from page 6 of the Report, will doubtless be acceptable to our readers as exhibiting briefly the sort of information which the larger tables supply in detail. It certainly furnishes ground for some congratulation, inasmuch as it "shows a remarkable and most satisfactory reduction in the amount of mortality in all classes of troops; indeed, except in the depôt battalions, it is little above that of the civil population in the healthiest districts of England."

	Strength.	Admitted into Hospital.	Died.	Ratio per 1,000. Admissions.	Ratio per 1,000. Deaths.	1837-46. Annual ratio per 1,000. Admissions.	1837-46. Annual ratio per 1,000. Deaths.
Household Cavalry	1,213	653	10	538	8·24	..	11·09
Dragoon Guards and Dragoons	8,059	7,908	64	981	7·94	962	13·64
Royal Artillery	11,508	14,877	92	1,293	7·99	1,189	13·92
Royal Engineers	1,243	1,579	9	1,270	7·24	..	..
Military Train	1,139	1,439	7	1,263	6·14	..	..
Foot Guards	5,939	4,701	54	791	9·09	862	20·43
Infantry Regiments	19,621	18,915	149	964	7·59	1,044	17·89
Dépôt Battalions	22,993	26,421	311	1,148	13·52	..	..

In explaining the reduction, the writer considers that it is in some degree "the effect of selection, as so much larger a proportion of the force than formerly consisted of men recently enlisted, and who may not have been exposed for a sufficient length of time to the deteriorating influences which affect a soldier to have materially suffered in health from them." The mortality of second battalions is, he shows, less than that of first battalions, the former consisting to a great extent of newly raised men.

When discussing the sickness and mortality from various classes of diseases, however, he has occasion to point out the influence of other ameliorating conditions. Thus in the case of the Foot Guards, it is shown that the sanitary improvements of their quarters in the Tower, the draining of the ditch, and the supply of good drinking water, have been followed not only by a reduction of cases of continued fever from 77·7 per 1000 to 32·2 per 1000, and of deaths from fever from 2·44 per 1000 to .84 per 10 0, but that cases of dysentery and diarrhœa, which in former times invariably prevailed to a great extent, have undergone a considerable reduction.

When speaking of enthetic diseases, the writer dwells very properly upon the serious loss to the State which arises from venereal disorders in the Army. And this loss is an increasing one. "The increase of venereal," writes Dr. Balfour, "has varied from one fourth to one-half of the former average; except in the household cavalry, it has given rise to not much under one-half of the admissions into Hospital, and, as the cause of so great an amount of inefficiency, deserves the serious consideration of the military authorities. In 1859, there were 422 admissions into Hospital on account of venereal among every 1000 men serving in the United Kingdom From data which will be available for publication in the next annual report, the duration of cases of this class has been found to average 23·22 days. Assuming the mean strength of troops in the United Kingdom to be 90,000, the inefficiency arising from venereal alone must therefore be equal to the loss of the services for the whole year, of 2417 men, or of nearly three regiments."—P. 14.

By going through this little calculation, these figures certainly come out as Dr. Balfour represents, but we can scarcely convince ourselves there is not a mistake. Dr. Balfour means that, at any day in the year, there will be a mean number of 2417 men in Hospital from venereal. In an appendix to the Report, there is a Table, No. II., showing the "average daily sick among the troops serving in the United Kingdom during the year 1859." The "troops" referred to, however, are only the household cavalry, dragoons, military train, foot guards, and infantry of the line, making (according to the Table extracted above) a strength of 35,971 men, of these 998 are daily sick. Applying Dr. Balfour's rule to these, and taking the admissions from venereal diseases in the arms referred to, as given in a table he has furnished, it would appear that about 80 per cent. of these 998 sick on any one day are cases of venereal. If so, we civilians are staggered by it. If so, it is indeed full time some steps were taken for the protection of our soldiers, and "it becomes a question of grave importance by what means these diseases can be diminished." According to Mr. Acton, there was a time when the garrison of Berlin 19,030 strong, furnished in a year 1423 cases of syphilis. By the adoption of certain means, in the course of three years the cases fell to 332. That similar means could not be brought into operation generally in this country, we can well believe; but still it is worthy of consideration how far they may be applicable to the smaller garrison towns, as Woolwich, and the vicinity of such military stations as Aldershott, at all events, when such localities attain the unenviable notoriety of the former of these places.

In 1858 an order was issued for the re-vaccination of every recruit on joining his regiment, and the results of this operation appear in the section we are considering. The re-vaccination was not confined to recruits, however, and tables are given of the results in soldiers, not recruits, as well as in the embodied militia. We cannot transfer the whole of this table to our pages; but that portion which relates to recruits is too important to be omitted. The number of recruits re-vaccinated during fifteen months was 21,686.

Results.	In those who bore marks of previous small-pox.	In those who bore good marks of previous vaccination.	In those who bore doubtful marks of previous vaccination.	In those who bore no marks of previous vaccination or small-pox.	Total.
A Perfect Vaccine Pustule	350·06	388·71	427·61	536·64	398·37
A Modified do.	187·09	221 16	251·93	206·06	217·33
A Failure in	462·85	390·13	320·46	257·30	384·30
Total	1000·	1000·	1000·	1000·	1000·

The second division of the work before us consists in a report of the Sanitary Branch for 1859 by Dr. Logan, head of this department. The sanitary state of each station of the army, and the sanitary transactions of the year are briefly recorded. There is no attempt to conceal the very unhealthy state of some of these stations, arising out of the localities

selected in less careful times as sites for barracks and military hospitals, defective drainage and appliances for ventilation, cleanliness, etc.

When the Chinese war broke out, a Sanitary Officer was, under the new Medical regulations for field service, attached to the expeditionary army, and there is appended to this report the instructional memorandum as to his special duties. No one can read this memorandum without feeling thankful that whatever may have been the previous *laches* of the military authorities, an era of reform has opened. If the Sanitary Officers of the Army do their duty, a commander can never again plead ignorance or any other excuse than stern necessity, should he encamp his army upon a marsh, should cholera, fever, or dysentery result from defective scavengering, bad water, unwholesome food, improper clothing, unnecessary exposure or fatigue, and those numberless causes which do so much to break down the efficiency of troops, and are so much more fatal than the casualties of war. If all this fair promise bear fruit, troops, whether in barracks or in the field, will in future be well cared for. This is the way to render the service popular. Men who will walk coolly to the cannon's mouth may fairly decline a service which involves the risk of perils arising from an unseen foe.

The sanitary report concludes with six Reports on the Medical Topography of certain stations. It is intended to publish from year to year similar selected papers on Medical Topography, "with the local and special influences on the health of the troops, an arrangement by which Medical officers, in a course of years, may be in possession of a valuable range of information as to the principal stations where troops are called upon to serve."—P. 182.

The third division consists of an able Medical Report by Dr. Mapleton. To this report are appended papers on Practical Medicine and Surgery which constitute the commencement of what will, doubtless, in time, prove a valuable series of Medical and Surgical Transactions. The papers in the present volume include three on Sun-stroke or Solar Apoplexy, from the pens of Mr. Murphy, Dr. Todd, and Dr. Barclay; one by Dr. Massey, on Acute Dysentery and its Treatment by large Doses of Ipecacuanha; Cases of Gunshot Wound of the Face by Dr. Savage; an abstract of the Annual Report of the Wounded of the 78th Highlanders at Lucknow, and various others papers of great interest, which we may notice hereafter. We are happy to see that even the candidates for army appointments are encouraged by the pages of this Report being thrown open to their contributions.

The volume is of general and professional interest. It relates to the health and diseases of men selected at early manhood for their bodily soundness and placed under known and controllable conditions. The results arising from their management have all the value of those of an experiment. This is the scientific aspect of the reports. The country at large will take a practical view of the matter, and will insist on improved health and lessened mortality keeping pace with extended knowledge.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE ANTAGONISTIC EFFECTS OF OPIUM AND QUININE.

By Dr. NIVISON.

Dr. Nivison's attention was drawn to this subject by the assertion of M. Gübler that these substances ought never to be administered together, so antagonistic are they in their action. Dr. Nivison maintains that this antagonism only influences the bad effects of these substances, and enables us to prescribe them simultaneously with advantage under circumstances when they could not otherwise be given. Some of these he enumerates: —1. Many acute inflammatory conditions will promptly yield to the influence of full doses of opium, but such doses cannot be given without the risk of so far paralysing the nervous energies as to induce fatal congestions. Quinine, however, pre-eminently possesses the power of giving contractile action to the capillaries, and thus overcoming contraction; and experience has shown that if the proper amount be combined with opium in these cases, a sufficient quantity of the latter may be safely given. 2. A frequent objection to the free use of opium is its tendency so far to reduce the biliary and renal secretions as to incur the risk of fatal toxæmia. Combined with quinine, this tendency is, to a great extent, counteracted. 3. Opium frequently reduces the respiratory action so that the blood becomes imperfectly aërated—an effect obviated by the addition of quinine. 4. The notoriously unpleasant after-effects of opium do not usually appear when it is given with quinine. 5. In cases of extreme exhaustion the free use of opium is the sheet-anchor; and in the reduced state of the sensibilities of the system the extent of its toleration is astonishing. Under these circumstances, however, it not infrequently happens that the quantity which is barely enough to produce the reaction, is not sufficient when this does occur to produce unpleasant narcotism. By the addition of quinine the desired action is secured with a less amount of opium, while the more protracted operation of the quinine will enable us to maintain the reaction for any desired length of time, without those frequent repetitions of the opium that otherwise would be necessary. So, too, persons in a state of narcotism from overdoses of opium may be often promptly roused by a full dose of quinine. This is especially the case in young children, who usually tolerate opiates very badly. 6. A large proportion of the persons who, in consequence of their idiosyncracy, cannot take opium, are enabled to do so when it is combined with quinine.

On the other hand, certain well-known effects of quinine are often desirable, where, from peculiarity of circumstances, we either cannot obtain them, or, doing so, we bring with them such an undesirable train of concomitants, that we are forced to dispense with it. Thus: 1. The prominent feature of many diseases is dangerous *congestion* of some internal organ, for relief of which the contractile action of quinine on the capillaries is very desirable; but we find on trial that by it we only impart a peculiar *excited* action to the general circulation, under the influence of which the congestion is aggravated rather than relieved. The addition of a sufficient quantity of opium to control this excitement, will not only insure the action of the quinine on the capillaries, but by diverting the general circulation to the surface, aids still further in overcoming the congestion. In this class of cases either opium or quinine, acting alone, would almost certainly add to the existing congestion; in combination the bad effects are neutralised, and the two remedies co-operate in producing the desired relief. 2. There are many forms of *inflammation*, to which, *mutatis mutandis*, the above remarks will apply with equal force. Judicious combinations of these remedies will often give us the most perfect control of the vital forces, and enable us to fulfil the various indications in the most satisfactory manner. Valuable information on these points may be found in the *Dublin Hospital Gazette*, July, 1856, and *Dublin Journal*, August, 1856. 3. Quinine and opium may often be employed most advantageously in combating various disturbing symptoms in *fevers*. 4. There are various affections usually termed *neuralgic*, which are palliated by opiates, and sometimes cured by quinine. These cases will often yield more speedily to the combined influence of opium and quinine than to any other known remedies. 5. There are numerous morbid conditions belonging to the *neuroses*, often associated with anæmic states of the system, where the true etiology of the disease can doubtless be traced to *defective nerve-nutrition*. We have already had occasion to notice the action of both opium and quinine in modifying and improving the function of nutrition. In the present state of our knowledge, there is nothing that would preclude the idea that this improved nutritive action may extend to the nerve-tissue. But whatever the *rationale*, the fact remains, that very many of these neuropathic conditions will yield to the combined action of these remedies.—*American Journal of Medical Science*, July, pp. 51—58.

THE ACTION OF DIGITALIS.

Dr. Germain, as the result of his investigations, comes to the following conclusions:—1. Notwithstanding the isolated opinion of Sanders, in contradiction with all which has been observed before and since his time, digitalis does diminish the frequency of the contractions of the heart. 2. Nothing proves that it diminishes the strength of its contraction, while theory, physiological experiment, and the Author's own experiments, demonstrate that one of its mediate effects in narrowing of the

orifices of the heart is to increase such strength; and that, consequently, there is no danger in administering it in cases in which the energy of the heart appears diminished. 3. The frequency of the contractions of the heart in cases of narrowing of its orifices prevent this organ from recovering its normal function, and disorder of the circulation being thus produced, the amelioration which follows the administration of digitalis is explained simply by the power it possesses of diminishing the frequency of the contractions. 4. There is no proof that digitalis is possessed of diuretic properties, the reputation conferred upon it to this effect by Withering having been accepted without discussion. 5. The diuresis which often follows when an amelioration of the condition of the circulation has been produced in organic affections of the heart through the administration of digitalis, is only a mediate effect resulting from the return of the circulation to its normal condition. 6. All authors are unanimous in admitting that digitalis exerts a powerful action on the stomach, stimulating the appetite in small doses; but in those which are required to act upon the heart, inducing anorexia, or even nausea, so as to become the cause of dangerous dyspepsia in many cases.

From the above it follows that digitalis should be employed in affections of the heart consisting in narrowing of the orifices of this organ. But, in other affections, accompanied by palpitations, great care must be taken not to give it, inasmuch as the relief it gives rise to is in such cases insignificant, and so far from acting on the primary cause of the disease, it would, in the majority of cases, only keep this up by deranging the functions of the digestive organs. Lastly, it should not be administered in dropsy which does not depend upon an affection of the heart, for it possesses no diuretic properties, and given in such cases under this false idea, it may become a cause of dyspepsia, and place new obstacles in the way of recovery, or hasten the fatal termination of the disease.—*Gazette Hebdomadaire*, No. 44, 1860.

EXCERPTA MINORA.

Anomalous Formation of the Fingers.—Dr. Friedinger brought an example of this before the Vienna Medical Society. On the right hand of the infant were five fingers, each having three phalanges, and all the five being in a parallel direction, so that the thumb of this hand was entirely wanting. On the left hand there were also five fingers with three phalanges, but the rudiment of a thumb also existed. Dr. Friedinger is not aware that an exactly similar anomaly has been observed. The mother had borne two children before this infant, one of them having the fingers normal, and the other exhibiting the same anomaly as just related. The influence of the mother is shown in the fact that the three children had separate fathers. The two daughters of this woman's aunt exhibited similar anomalies.—*Wochenblatt*, No. 13.

Rupture of the Kidney by Running Over.—A child, aged four and a-half years, was run over by a cart, and died twelve hours after. Externally there was no mark of injury, except a broad suggillation of the right thigh, evidently due to the wheel. The abdomen, however, was tensely distended, and on opening it much fluid and coagulated blood was found therein. The right kidney was enveloped in a coagulum, and was found to be transversely ruptured, the organs being completely divided into two parts. This case is highly interesting in a juridical point of view, as so great is its rarity that Casper has not met with a similar instance, and the remarkable fact of the injury being unattended by external injury.—*Berlin Med. Zeitung*, No. xxvi.

Leucorrhœa and Ulceration of the Cervix Uteri in Pregnancy.—In order to test the accuracy of M. Cazeaux' assertion that ulceration of the cervix uteri are met with in seven-eighths of pregnant women, M. Charrier instituted a careful examination of one hundred indiscriminately as they offered themselves to his notice. The following are the conclusions of the memoir he has compiled on the subject:—1. Leucorrhœa precedes and gives rise to ulceration of the cervix. 2. The congested conditions and processes of hypertrophy taking place in the pelvic organs are the causes of this leucorrhœa. 3. At first a physiological condition, it may become morbid under the influence of a bad state of health. 4. Nearly two-thirds (72 per 100) of pregnant women have leucorrhœa. 5. Nearly eight-tenths (56 of 72) of these subjects of leucorrhœa have ulcers of the cervix. 6. Of the 56 women, 41 were multiparæ. 7. For the treatment we should confine our attention to the general condition, giving mild aperients and preparations of iron, and remedying disorders of the digestive organs. Local treatment would frequently induce abortion.—*Bull. de Thérap.*, vol. lx., p. 59.

Passage of Quicksilver into the Blood.—Dr. Heller, in continuation of former communications, related to the Vienna Medical Society two cases in proof of the passage of mercury into the system after its external employment. These were examples of abortion, in the fifth and sixth months of pregnancy; and in both cases quicksilver was found in the bodies of the children,—the mercurial ointment being in use by the mother at the time of the abortion. In answer to the question whether the mercurial inunction might not act as a cause of abortion, Professor Sigmund replied that he had for the last ten years treated syphilitic women, in every stage of their pregnancy, by this method, and yet had never met an instance of abortion.—*Wochenblatt*, No. 10.

Treatment of Tænia by Copper.—Dr. Thienemann states that tænia is a very prevalent affection in East Prussia, and that he has tried the various vegetable substances recommended for its cure (the æthereal extract of filix was among them), with very unsatisfactory results. On the contrary, he has derived great benefit from the employment of copper, which he recommends to be given to the adult as follows:—℞ Cupri oxyd., succ. liquir., rad. Altheæ, āā ʒj.; ol. cinn., gtt iv., M. Fiat pil. 120. Two pills to be taken four times daily, and to be increased until six or eight are taken at a dose. Commonly, portions of the worm soon come away, and then masses of mucus loaded with other portions. Frequently, however, especially if the copper acts as a purgative, or is combined with a purgative, the entire worm is discharged, living or dead. No mischief has ever resulted from the employment of the remedy.—*Berlin Med. Zeitung*, No. x.

The Small-Pox in Prussia during 1859.—From the Report just published on the authority of the Prussian Government, we extract the following figures. A great decrease of small-pox occurred in 1859 as compared with 1858, for while in the latter year there were 30,843 cases with 2789 deaths, in the former year there were but 16,035 cases with 1371 deaths. Of the 16,035 cases occurring in 1859, there were 4627 among children (*i.e.*, under 15 years of age) and 11,408 amongst adults; and of the 1371 deaths, 569 occurred among children, and 802 among adults—the mortality in the whole number being 8 per cent.; among children, 12 per cent., and among adults, 7 per cent. Of the 16,035 cases, 13,364 had been vaccinated, and 2671 had not been. Of the vaccinated 6 per cent. died; 7 per cent. among the children, and 5 per cent. among the adults. Of the non-vaccinated, 20 per cent. died; 23 per cent. among the children, and 17 per cent. among the adults. Among the cases, 591 had been re-vaccinated, and of these 42 died.—*Berlin Med. Zeitung*, 1861, No. ix.

FOREIGN CORRESPONDENCE.

FRANCE.

Paris, August 14.

THE ACADEMY OF MEDICINE.

In article seventy-seven of the French Civil Code, it is said that neither a post-mortem examination, nor embalming of, nor the taking of a gypsum cast from a dead body, can be done until twenty-four hours have elapsed after death; and even then a written permission of a commissary of police, and the observance of certain formalities, are necessary for it; for instance, in embalming, the use of poisons by which a previous poisoning might be concealed, is not allowed, etc. This article appeared to admit of doubtful interpretation to one of our most respectable Physicians, Dr. Felix Hatin, and at the end of last year this gentleman, therefore, brought the subject before the Academy of Medicine, asking whether under the provisions of this article the Physician was allowed to perform Cæsarean section on a dead body, or whether by waiting twenty-four hours he should expose the child to certain death, which might perhaps be prevented by a prompt operation. The question seems to be simple enough, and has been generally answered to the advantage of humanity by the conscience of the Medical man. Still the letter of the law is important, and it appeared to forbid the operation mentioned,

on account of the death of the mother being perhaps only apparent. The discussion which followed M. Hatin's remarks, and with which religious principles were, with very bad taste, mixed up, has lasted for six months; but I cannot say that it has done much towards increasing the consideration in which the Academy is held by the Profession and the public, as much valuable time was wasted, and the question itself has by no means received a satisfactory solution. Indeed, much indignation has been felt in many professional circles at the absurd turn the discussion took now and then, and if the repulsive dulness of the proceedings had not been sometimes relieved by a few scientific papers on other subjects, (as for instance, M. Trousseau's note on Cerebral Apoplectiform Congestion in its Relation to Epilepsy), the Academy would have lost even still more of its *prestige*. One member, for instance, contended that priests should be allowed to perform Cæsarean section in the first months of pregnancy, and that they should be empowered to compel Doctors, barbers, midwives, and other persons not belonging to the Medical Profession, to do the same. This ridiculous proposition was so much the more unnecessary, as so far back as 1839, the Prefect of the Seine had ordered that in the case of a post-mortem examination of a gravid woman, the chief object of the Medical man should be to save the life of the child if that were possible; besides, the articles 312, 393, 725, and 906, of the code civil, put the 180th day as the first term of the manifestation of life in the embryo. Other fanaticists even went so far as to desire that Jewish Physicians should be compelled to christen Catholic children; and it lately happened that a celebrated accoucheur christened the embryo of a Jewish mother, to the utmost indignation of herself and relatives.

The first hint on this subject is to be found in the work of a Sicilian Jesuit and inquisitor, Don François Emanuel Cangramilu, of Palermo, which was translated into French by M. Dïnouart, and is entitled "Sacred Embryology." (Paris, 1762.) A revised edition of this work by Dr. Debreyne, under the title of "Moechiologia," has recently appeared. In this book it is said, that the Cæsarean section ought to be made as early as the fourth month, when the fœtus is only twenty to thirty centimètres long, and it does not weigh more than 300 grammes; although in the sixth month, when the length of the embryo is thirty-five centimètres and its weight may be from 600 to 800 grammes, the skin is so soft, transparent, and imperfect, and the lungs and intestines so incompletely developed, that their condition does not allow extra-uterine life. Even after the 180th to the 210th day, only very few children are capable of living, although a few instances are on record of such having been the case. Thus M. Carden, of Milan, mentions that he has seen a girl in her eighteenth year who was said to have been born five months and eighteen days after her mother had miscarried, and in the same city there lived a nun of the name of Euphrasia, in the convent of St. Radegunda, who had been born five months and twenty days after a miscarriage of her mother. The author says that super-fœtation is not to be thought of in these cases, as this is so rare, that it cannot be taken into account, but this is not necessary, as if a woman is pregnant with twins, it often occurs that after the expulsion of one ovum, the other is further developed, provided that each ovum has an independent placental portion.

The cases mentioned by Volessus, Shenking, and Monkeng, are not sufficiently authenticated, and the case of the Duc de Fronsac, afterwards Marshal Richelieu, who was declared legitimate by the French Parliament, in spite of being a five months' child, is also doubtful. The case of the Physician Fortunis Liecetti, who was said to have been born after 4½ months' gravidity, and to have lived the first few months of his extra-uterine life in a gently heated oven, and who, nevertheless, reached his eightieth year, is equally apocryphal.

According to M. Depaul, the life of the child can only last a very short time after the death of the mother, and the cases recorded of successful Cæsarean section after death (for instance, that of the Princess Pauline of Schwarzenberg), are not given with sufficient detail. M. de Kergaradec gives the following case:—"When I held the post of interne in the Hospital St. Antoine, in 1807, a gravid woman died; the post-mortem examination was not made until the following day, but the child still showed some signs of life (query, of what kind?), and we were very glad to christen it." As no further details are given, this case has also no scientific value.

M. Velpeau believes it to be impossible to extract a living child a quarter or half-an-hour after the death of the mother. Those cases which have been described of children who have lived a long time in the uterus of a dead woman, are of the same value as the celebrated story of the stone-child, of the city of Sens, which was born after having remained in the womb of the mother for twenty-eight years, and immediately afterwards commenced speaking Latin. M. Depaul, in his *brochure* on Cæsarean section, mentions sixteen reliable cases, in which the children were found dead soon after the decease of the mother, and eight cases in which the children lived. In the "Sacred Embryology," on the other hand, in ninety-three cases eighty-eight successful ones of post-mortem Cæsarean section have been recorded! This appears incredible. The author of this book is anxious to see the Physician, or any other person who may be on the spot, even if not professional, compelled to undertake the christening of the embryo, even if this is only twenty days old.

I believe your readers will agree with most of the conclusions drawn by our illustrious Professor of Midwifery, M. Depaul, which are as follows:—The Physician is the only competent judge on the feasibility of the Cæsarean section after death. The law leaves him all the liberty he requires, and it would be superflous and dangerous to add anything on this point to the code. Before 180 days have elapsed after conception, no fœtus is able to live, and there is no reliable case on record of life before this time. If a pregnant woman dies, and the child is not yet dead, we may be sure that its death will ensue very soon, generally a few minutes only after that of the mother. The history of well observed cases agrees in this respect with the conclusions drawn from anatomy and physiology. All cases of children who are said to have lived for hours and days after the death of the mother are apocryphal. One hour after the mother's death is the utmost limit of the child's life, and even this term is almost too long. The Physician ought not to conjecture in such cases, but rather resort to auscultation, in order to enlighten himself on the subject. If a woman dies after the 180th day of pregnancy, the fœtal pulse may be felt; if it is absent for several minutes it is a proof of the child's death. The disease of which the mother has died has much influence upon the life of the child. Before Cæsarean section is performed, the accoucheur ought to see whether the child cannot be extracted in the natural way. Turning, forceps, or *débridement* of the collum uteri, are preferable to Cæsarean section. The Physician only should do such an operation, and he ought to make it with the same care as if the mother were still living. The consent of the family should be obtained for the operation, and if there is any dissent, the husband's wish is decisive. Cæsarean section of women who die before the 180th day of pregnancy, loses all scientific and practical interest, and becomes only a question of religion. Concerning christening, it is neither decent nor reasonable to christen an embryo before the end of the fourth month, and it ought generally speaking to be avoided until the end of the sixth month. It seems desirable (?) that intra-uterine christening, by means of injection, should be recognised by the ecclesiastical authorities. Such a proceeding would be convenient to all, and would, no doubt, prevent much insecurity and trouble.

In conclusion, I beg, in the name of affronted decency, to thank the Academy for having at last terminated this discussion.

AMIENS, August 24.

MANKIND BEFORE THE DELUGE.

OUR illustrious countryman, M. Boucher de Crèvecœur de Perthes, the first discoverer of the artificially-shaped implements in the drift, President of the Imperial Society of Emulation of Abbeville, and author of many valuable works on archæology, philosophy, and travel, has recently presented to the Crystal Palace at Sydenham a collection of the interesting objects found by him in the diluvial layers in the neighbourhood of Abbeville and this city; and as they will be shortly exhibited in your grand museum of art and science, I believe that an account of the important anthropological researches of this *savant* will be acceptable to you.

Until recently, zoologists as well as geologists were agreed that man did not exist before the Deluge. Some of the most eminent men of science even contended that, at that period, when the] extinct races of elephants, hippopotami, and

rhinoceros, together with tigers, leopards, and hyenas, lived in this quarter of the globe, man could not possibly have existed. Thus Cuvier, in his treatise on the revolutions of the globe, said, it was settled that fossil human bones had no existence; and it is true that those which had been at first described as of gigantic human beings, were soon recognised to be remains of mammoths and other animals. But even then the question was not so entirely settled as the great French anatomist believed it to be. It was well known, that, in ravines and excavations of rocks, which had, by some catastrophe, become inaccessible to men, and which had not been visited for ages, human bones were found, together with such of antediluvian bears, hyænas, hippopotami, buffaloes, etc., and in some places they were even enveloped and covered with stalactites. This was explained by the supposition, that human remains had only come into those caves by some accident within our period of creation, long after the animal remains had been buried in it; but this was merely an hypothesis, and could not but be open to objection.

Recent discoveries can no longer leave any doubt on the philosophical mind that man really co-existed with the great mammalia of the diluvium; and although there are still those who deny this conclusion, the most eminent men of science have become converted to this theory. That the question has at last been cleared up, is solely to be ascribed to the researches of M. Boucher, who, during his whole life-time, has worked at the elucidation of this problem, which he studied as far back as 1805, when in Marseilles, and visiting Roland's grotto, in which he searched for fossil human bones. He soon came to the conclusion that man had existed at a much earlier period than is generally supposed; in the first instance, he thought that the tradition everywhere extant of a human race destroyed by the flood could not possibly be without foundation. In that period there existed mammalia closely related to man, which could only live under the same atmospherical conditions as he, so that the earth was certainly inhabitable for mankind. He also found traces of man wherever the remains of the larger mammalia were found, and where no fossil remains of our species could be discovered, M. Boucher believed that they had been either destroyed or overlooked.

After long study the indefatigable zeal of M. Boucher was at last rewarded. He found in certain layers of the earth a few flints, which had evidently been shaped by the human hand. Although this was, to M. Boucher's mind, a further proof of his theory, the learned world refused to accept it as such, and it was objected to him that these implements were not at all like those carefully-shaped and well-sharpened stone-hatchets which are not unfrequently found in the most ancient tombs. M. Boucher then no longer sought allies in the learned world, but amongst the working men in the stone-pits, to whom he made known his object; and in 1840 he was in possession of twenty flints evidently shaped by men, which had been found in diluvial layers. He then gained some adherents to his views, but was still, by the majority of *savans*, believed to be a monomaniac.

Even so late as 1858 the French ridiculed his ideas. The learned Societies refused to examine his propositions, and when he offered to make the Government a present of his collection, this offer was not accepted. At last, by a happy accident, Mr. Falconer, Vice-President of the Geological Society of London, was induced to visit Abbeville. He inspected the cabinet of antiquities collected by M. Boucher, and gave a report of it on his return to England. From that time many English geologists travelled to Abbeville and to this city, and there appeared, one after the other, Messrs. Prestwich, Evans, Godwin Austen, Flower, Mylne, Sir Roderick Murchison, and at last the leading English geologist, Sir Charles Lyell. After having carefully examined the drift, they all agreed with M. Boucher, and came to the conclusion that these flint implements were shaped by men, that they were found in virgin soil, that they were connected with the remains of an extinguished species, and that the period of them was anterior to the time when the surface of the earth had received its present configuration. Thus M. Boucher had, as he expressed himself, gained his action in England.

In the neighbourhood of Abbeville, in the valley of the Somme, immense diluvial layers exist, which rise to more than ninety feet above the level of the river. As they are cut through by the fortifications of Abbeville, by canals and by railroads, it is not difficult to examine them. The most important point is near Menchecourt. In some of these layers millions of large flints are met with, amongst which are some evidently shaped by the human hand. These are found from fifteen to thirty-six feet below the surface. The larger of them have probably served for hewing, and M. Boucher calls them hatchets. Close to these implements river and sea-shells were found, such as now only exist in the Nile and other rivers and lakes of the torrid zone; for instance, *cyrene fluminalis* and others. Fossil bones of rhinoceros, mammooths, hippopotami, and an extinct species of oxen, which have been much larger than those of our time, have also been met with there. Near this city, where the geological formation is nearly the same as in Abbeville, the diggings have had the same result. M. Albert Gaudry, who was charged by the Parisian Academy of Sciences to search for such implements, found in a few days nine flints shaped by man, together with shells, fossil bones of large oxen, of a horse and other animals. These hatchets do not at all resemble the cuneiform hatchets which have been found in ancient tombs. They are exclusively made of flint, are of very rude workmanship, and either longitudinal and acute, or oval. M. Boucher believes that they were made by knocking off small pieces by means of hard stones, just as the primitive knives, lances and arrows of the Germans. No polishing or grinding was attempted; the hatchets were either used with the hand as they were, or they were fixed in sticks or clubs. The wood has of course not been preserved, but on the larger specimens there are pegs, to the upper extremity of which the wood was evidently fixed. Narrow blades of stones were also found, which were probably used as knives, and stones with indentations which could be employed as saws.

It was at first always objected to M. Boucher, that the flint implements just described were only found at Abbeville and Amiens, but not in other places. M. Boucher replied to this, that it was not his fault, as indeed all his endeavours to excite colleagues of his to similar researches failed, until one of your countrymen who visited Abbeville, Mr. Prestwich, recollected that at the end of the last century shaped flints had been found close to fossil remains of animals, in the village of Hoxne, in Suffolk. He therefore, immediately on his return to England, proceeded to Hoxne, where he examined the diluvium, and was informed by the working men that quite recently some flints had again been found there. He then commenced digging himself and found, about nine feet below the surface, not only bones of mammooths and oxen, but also flint hatchets which quite resembled those discovered by M. Boucher. Some months afterwards M. Gosse, of Geneva, dug in the stone-pits of Grenelle, near Paris, which are quite similar to those of Abbeville; and found, at twelve to fifteen feet below the surface, two round hatchets, fifty knives and a few other pieces which had probably served as tops of lances and arrows.

It is, therefore, now impossible to doubt, that man was already in existence when the colossal mammooth, the hyæna, the tiger, and the gigantic deer lived in our latitudes. That the instruments then made by men, are of very rude workmanship, is no matter of surprise, as even in later periods, hatchets were made which are only different from those mentioned above by being ground on whet-stones; besides, we must recollect, that in the torrid zone far less finished instruments are sufficient for man than in the moderate and cold climates. It is true that fossil bones of man have not yet been found; but that we may not despair of discovering such, is shown by the interesting circumstance, that quite recently a human skull was found in a limestone cave in the Neanderthal of Rhenish Prussia, which was totally unlike any other human skull ever found before. This skull has been described in Müller's *Archiv.* by Professor Schaaffhausen, of Bonn, who found it to be similar to that of the chimpanzee and gorilla; he ascertained that it belonged to the period at which the animals of the Deluge still existed, and that it was not a pathological malformation, but of a typical race character. Those of your readers who wish for some more information on M. Boucher's discoveries, will find it in his "Antiquités Celtiques et Antediluviennes" (with eighty plates); "Essais Philosophiques sur la Création;" and especially in the *brochure*, "De l'Homme Antédiluvien et de ses Œuvres." Paris: 1860 (a).

(a) The implements described by our correspondent are now exhibited in the Technological Department, in the Northern Transept of the Crystal Palace.—Ed.

GERMANY.

Breslau, August 4.

THE JUBILEE OF THE UNIVERSITY.

Much anxiety was felt here during the last few months, when the preparations for the fiftieth anniversary festival of this University were commenced, that it would turn out a great failure, on account of the dissensions which broke out between the students and the professors; but happily such has not been the case, and amongst the thousands who had assembled here from far and near to take part in the festivities, the greatest cordiality prevailed. German students are apt to become troublesome to their teachers, and it has sometimes even happened that they have left the University town in a body, threatening never to return to it unless their requests were granted; of course to the greatest terror of the "Philistines," and to the infinite trouble and amazement of the Professors. This high spirit of the German students is nourished by the corporative ties, by which they are held together; and feeling themselves thus powerful, they claim to be on a footing of equality with the College of Professors, which is represented by the Rector Magnificus and the Senate. This claim is, of course, not so fully recognised as the students would wish it to be, especially not in the Universities which are chiefly frequented by the youths of the same province; while in those where strangers form the greatest proportion, as, for instance, in Heidelberg, the students have a more powerful influence. Their unions are of a different kind, although their interests appear to be identical. That they wear different colours and badges, is sufficient to cause no end of dissensions amongst them. There are the so-called county-corporations, which consist of persons coming from certain towns or counties, and from which they take their name; thus we have a Borussia, Silesia, Lusatia, etc. Besides these we have the so-called "Burschenschaft" (literally "association of lads"), to which, irrespective of towns or counties, all those German youngsters belong who have a liberal political tinge. The "Burschenschaft" was founded at the end of the last French war, when the students resolved to do their best towards promoting a unification of Germany. The principles held by these associations are, however, not very strict, and many a "lad" has in after times become a pliant instrument of the Government; while members of the county associations, which are, on principle, quite foreign to politics, have done battle for right and liberty. Finally, there is the "General Studentship," which consists of those youths who do not belong to any of the before-mentioned corporations. As was to be expected, these different unions disagreed with each other and with the Senate as to the mode in which they should take part in the festival, and a complete feud was only prevented by the circumstance that many quondam students of the University, who had been members of several of the corporations, and who stood as it were between the contending parties, formed a centre, and did their best to conciliate the fiery spirit of their younger brethren.

Before I proceed to a description of the festival itself, I shall give you a few particulars on the origin of this University:—

A College of Jesuits existed here as far back as the seventeenth century, when Silesia was under Austrian rule, but which was not at all popular. The inhabitants, by far the largest majority of whom were Protestants, had repeatedly made great exertions to found a University within the walls of the city; and as early as 1505 they had succeeded in procuring from the King Ladislaus, of Hungaria and Bohemia, to whom Silesia then belonged, a charter for the foundation of a University in which divinity, medicine, philosophy, ecclesiastical law, grammar, poetry, and astronomy should be taught. But the Pope at that time refused his consent, and intrigues were set on foot against the embryo University, especially by influential Poles, who feared that it would diminish the influence of that of Cracow. 150 years later, when the Jesuits crept into this city and appropriated to themselves the education of youth, the Town Council protested in vain against this usurpation, and renewed the request that a University might be established. The Jesuits, however, soon gained ground, and in 1702 they extorted a patent from the Emperor Leopold, which gave their school the privileges of a University. All the faculties were now, at least nominally, represented in it; medicine and law, however, were never taught, and divinity, philosophy, and philology, formed the chief subjects of study. At a later time a Professor of Anatomy was also appointed. The Jesuits erected the large building of the University; the Aula, which is only used on solemn occasions, is worth seeing for its ornaments; it is called Aula Leopoldina, from its founder, the Emperor Leopold. When Pope Clemens XIV., by his famous bulla "Dominus ac redemptor noster," abolished the order of the Jesuits, Frederic the Great protected their institute at Breslau, and raised it to even a higher prosperity than it had attained before.

The University as it is now has been formed by the union of the Institute of the Jesuits and another University, which formerly existed at Frankfort on the Oder, and whose name "Alma Viadrina," was also transferred to ours. This union was effected by order of King Frederic William III. in 1811, which is, therefore, the year of foundation of this University. The University of Frankfort was founded by the Electors of Hohenzollern, whose pet institute it was. The Elector Johann Cicero first intended to found a University there, but this was really done by his successor Joachim in 1506. Every one who is conversant with the history of syphilis, has heard of the fierce controversy, which at that time raged in Leipsic, between the two Professors, Simon Pistor and Martin Pollick, and of the students there fighting duels on account of the nature and antiquity of syphilis. Pistor, for whom Leipsic became too hot, transmigrated to Prussia, and assisted in founding the University of Frankfort. Although it possessed a few very excellent professors, epidemics, wars, and other events were unfavourable to its propitious development, and the transfer which was made to this city, was the best that could be done. Our University was founded at a time when Prussia was raising herself up again from a disgraceful fall, and it soon became a centre for patriots. The first volunteer corps which marched against Napoleon, was formed by the students of Breslau, who were under the command of their energetic and accomplished Professor Steffens. Many of them fell in the battles which crushed the French supremacy, and their names are engraved on brazen tablets, which adorn the Aula of the Alma Mater.

The University is now most intimately connected with the town; the students are objects of the greatest interest to the burghers, and the festival was signalised by a complete fraternization between the Philistines and the academical citizens. The houses were gaily decorated with flags, and large crowds continually thronged the streets. The Universities of Germany, Switzerland, Austria, Sweden, and Russia had sent delegates to congratulate their sister University; and many other men of fame were present, who did not come officially.

On August 2, the festival commenced with receiving the Deputations in the Aula Minor. The representative of the Ministry first read a letter from M. Bethmann-Hollweg, in which stress was laid upon the importance of science for the State, and in which it was promised that a Museum of Natural History should be founded here. After this, a Professor from Jena, who represented all the German Universities, delivered an oration, in which he congratulated Breslau as the Eastern stronghold of German science. A few touching words were then spoken by one of the Professors of Kiel, which, although a purely German University, now smarts under Danish rule, and longs for the day on which the eternal Schleswig-Holstein question may be settled in a satisfactory manner. The Academy of Sciences of Berlin was represented by the celebrated meteorologist, Professor Dove, who was formerly a student here; and speeches by him, and by the representative of the Imperial Leopoldine Academy of Naturalists, closed the first act of the festival, of the further progress of which I will send you a few particulars next week.

Dresden, August 4.

ON BOTRIOCEPHALUS OF THE ICE-BEAR.

Dr. Kuechenmeister, the well-known helminthologist of this city, who by his talents and indefatigable zeal has succeeded in unravelling so many phenomena connected with helminthology, has recently examined an intestinal worm discharged by a young ice-bear, who is confined in our Zoological Garden, and has brought the facts connected with it before the Society of Naturalists and Physicians of this city. The beast, which

is only a few months old, was one day seen to run about in his cage in a state of great alarm, dragging a long white thread after him, of which he in vain endeavoured to get rid. One of the keepers tried to quiet the animal by petting it, while the other rolled the thread upon a stick, and thus removed as much of it was possible. The keepers saw at once that it was a worm; but they preserved it in water instead of in spirits, so that when, a few days afterwards, it was handed over to Dr. Küchenmeister for examination, the worm had become entirely decomposed, and no joints were to be recognised. A microscopical examination of this fluid, however, showed oval-shaped eggs, with a slight lid, through which the young worms escape when sufficiently developed, and which is peculiar to the botriocephalus. Dr. Küchenmeister concluded that the infection had taken place from the fish with which the ice-bear was fed. Soon after the first part of the worm had come away, a second discharge took place, and a few yards of a very broad botriocephalus were then brought to Dr. Küchenmeister. It was then ascertained that the Director of the Zoological Garden had been advised to feed the ice-bear upon bread and fish, "in order that he might safely get over the infantile diseases." The animal had, however, recently received some fresh meat with cod-liver-oil, in consequence of which probably the botriocephalus had come away. The pieces of the worm examined by Dr. Küchenmeister quite resembled that found in man, being only somewhat broader than the broadest specimen of the human worm which has yet been examined. The ovaries were also larger and more voluminous, and contained larger ova than those of the human botriocephalus. This, however, does not show that the worm in question belongs to a new species, as we often find very considerable variations of size in individual worms of the same species. Still this ice-bear botriocephalus appeared to Dr. Küchenmeister to be of great interest for the still partly unknown natural history of the botriocephalus of man.

Three different kinds of this worm have been observed up to the present time—viz., matured worms with perfectly developed ova, the largest specimens of which are met with in man, and, according to Dresden experience, in the ice bear; the smaller in the eel, cod, flounder, sea fowl, mullet and ray. Besides, half-matured worms, in which there were ovaries, but no eggs, have been found in the seal, the racoon, sea mew, sea swallow, and the torpedo. Finally, botriocephali, which were quite undeveloped and without any trace of genitals or eggs, have been found in the intestines of cats and dogs which live on coasts, or other places where there is an abundance of water, and in the seal, the turtle, in water snakes, etc. In short, botriocephali are found in man and such mammalia as live on coasts or in the sea; in sea fish, turtles, and snakes. In man the worm occurs especially on the sea coast of the northern hemisphere and in Switzerland, where there is much water and fish. It is mostly observed in sailors, who on their return home bring it into the large commercial towns and harbours, and in such as live or travel in Switzerland. It is a curious fact that the only two specimens which have been found in America belonged the one to a Swiss, who had emigrated to America, and the other to an American, who had lived for some time in Switzerland. Water and fish seem, therefore, indispensable for the production of the worm. Those worms which have been found without fully developed eggs and ovaries might, perhaps, have become matured if the animals which afforded them shelter and food had lived a few weeks longer; but it is also possible that in fish, turtle, and snakes these worms never become fully developed. The undeveloped botriocephali are either found in the peritoneal cavity or in the intestines, while in the parenchymatous tissues of the body they have not yet been discovered. Those found in the peritoneal cavity resemble the worms which live free or enclosed in cysts, as the cœnurus cerebralis, which is met with in the ventricles of the brain of sheep, the cysticercus pisiformis, in the abdomen of rabbits, etc. The undeveloped botriocephali found in the intestines of fish and reptiles may either arrive there as embryos or they may, perhaps, have inhabited smaller animals before, which were eaten by the fish or reptiles, where the worms escaped from the eggs and became further developed. Thus a crab or an oyster may contain an ovum; a fish which feeds upon crabs and oysters may then swallow a half-developed botriocephalus and retain it in its intestines, and an ice-bear which feeds upon that fish will then become affected with the fully developed worm. It is, however, more difficult to ascertain in which way the botriocephalus is transferred to the intestines of man, as we eat almost everything dressed; and we cannot suppose that those oysters which come upon our table contain eggs of botriocephali, as in this case that worm would be much more frequent than it really is. It may, however, now and then happen that if sailors, fishmongers, or cooks disembowel the fish, the worm may come upon their hands, and from them pass to the mouth, and be thus lodged in the intestines.

TRICHINA.

Dr. Küchenmeister has also lately given us some remarks on trichina, the substance of which is as follows:—If we see a patient with sub-typhoid symptoms, whose consciousness is not much impaired, and without diarrhœa, typhoid exanthema, or considerable tumour of the spleen, but with very violent pains in the muscles whenever he moves, we may suppose that he suffers from acute trichina disease. It is then of importance to ascertain, whether the patient has eaten half-raw meat, especially pork; but we can be only certain in our diagnosis if we discover the worm by a microscopical examination of the contents of the intestines or of certain parts of the muscles. It seems to be cruel to excise living flesh from a patient; but Dr. Küchenmeister does not think it worse than explorative tapping, which is often done without scruple; besides we do not require a "pound of flesh," but only a few fibres. It may also happen that the patient may have an open wound, where a little flesh might be excised without inconvenience, as sometimes ulcers of the muscles and decubitus come on in such patients; or there may be a bad tooth with granulations, which might be cut off; but if there is no such thing, a little bit may be excised from the gums; or the bulky muscles of the thigh, or which is still better, the biceps brachii, which is most frequented by trichinæ, may be tapped with Middeldorpff's harpoon, by which some muscular fibres are easily obtained, or a seton might be made on the deltoid muscle of the patient and some fibres excised. But in certain cases it may be sufficient to filter the motions, and to search in the deposit for trichinæ, a method by which Dr. Waldeck, of Corbach, has succeeded in finding them.

If the Physician has satisfied himself in this manner of the existence in the system of fresh trichinæ, the first thing to be done is, to remove the parasites which exist in the intestines and from which a new infection continually arises; a purgative of calomel and jalap effects this best, but we must also endeavour to render the animals which are in other parts of the body, innocuous. If anything can effect this it is the administration of turpentine in small doses perseveringly given, so that the blood becomes thoroughly impregnated with this substance.

MEDICAL AFFAIRS.

The Saxonian Ministry of the Interior has recently submitted to the Chambers a bill relating to a change in the Medical affairs of this kingdom, which promises to be very salutary. The differences which existed until now between Physicians of the first and second class are to be abolished, as Physicians of the second class shall no longer be; at the same time the Surgical and Medical Academy of this city, which is exclusively used for the education of Army Surgeons, is to be abolished. All Medical men shall henceforth, before they are licensed to practise, show that they have passed a preliminary examination, that they have absolved the academical quadriennium, and also passed a subsequent Medical examination. A special class of persons is also to be created for phlebotomy, cupping, etc., and the barbers are no longer to exercise these functions. Such Medical men as wish to hold public appointments must pass a State Examination before the Medical Council. Young Doctors, who agree to live for five years in such places where Medical aid is wanting, shall receive travelling stipends for visiting Hospitals abroad; such stipends shall also be given to such as agree to serve as Army Surgeons for five years.

BERLIN, August 15.

ON OSTEO-PLASTIC RESECTION OF THE UPPER JAW.

THIS operation consists in separating the upper jaw from its connexion with other bones, and again restoring it to its normal position. An operation of a similar kind was first

done by Professor Langenbeck, two years ago, when he extirpated a naso-pharyngeal polypus; in that case he excised the nasal bone and the nasal process of the upper jaw, removed the tumour, and afterwards replaced the bones, with complete success. Another case in which the whole half of the upper jaw was first excised and then replaced, occurred in the practice of this distinguished Surgeon a few weeks ago.

The seat of naso-pharyngeal polypi is such as to require the resection of one-half of the upper jaw, and this has been done repeatedly, in France especially, by Messrs. Robert and Maisonneuve. In the cases which occurred in Professor Langenbeck's practice, he had always been able to perform extraction either from the mouth or the nostrils, or by division of the soft palate, and resection of the horizontal part of the os palatinum, or the resection of the nasal process of the upper jaw. He was therefore averse to the extirpation of the upper jaw, especially as experience has shown that a recurrence of the tumour is not prevented thereby. There are, however, tumours, which are attached in the neighbourhood of the Eustachian tube, and the foramen spheno-palatinum, and the sinus sphenoidalis, which cannot be completely removed unless the upper jaw is taken away. Besides, tumours are now and then observed in the fossa pterygo-palatina, which grow partly towards the naso-pharyngeal cavity, partly towards the fossa spheno-maxillaris, so that the upper jaw is quite surrounded by them, and must necessarily be removed before the Surgeon can attempt extirpating the tumour. Professor Langenbeck, however, satisfied himself, by a close examination of the skull, that the region just described, would become quite accessible by only removing the upper part of the jaw, without taking away the hard and soft palate and the alveolar process. Having been struck by this idea, he conceived that it might be possible to replace the upper jaw after the operation, just as he had succeeded in doing before with the nasal bone and the nasal process of the jaw. It was, of course, necessary to avoid the destruction of the soft coverings of the jaw, the skin of the face, the mucous membrane, and the periosteum of any part of the bone; and it was obvious that, on one point at least, it ought to remain attached to the neighbouring bones, in order to allow a sufficient supply of blood. These conditions he purposed to fulfil, by not separating the soft parts of the face from the bone, but merely cutting them through down to the bone, in the same direction in which the saw would have to work, and by leaving the nasal process of the upper jaw in contact with the nasal bone, and the nasal process of the frontal bone.

The following are a few particulars of the case in which this operation was first performed, with successful result:—The patient, a boy, aged 15, had always been healthy until two years ago when he perceived a want of air in the left nostril, which soon became perfectly impermeable, the voice being changed at the same time. About seven weeks ago, the left cheek and the eye began to protrude, and the latter, although otherwise healthy, was no longer used for seeing. No tumour was visible from the nostril, nor from the mouth, while in the middle of the left palatine process of the upper jaw the floor of the cavity of the nose appeared to be pressed toward the cavity of the mouth, and this part felt soft and elastic on account of the dislodgment of the palatine bone. Behind the soft palate a firm, lobular tumour could be felt in the left choana, which was quite filled up by it, the introitus into the left side of the nose being blocked up. This latter space appeared to be considerably enlarged, while the right choana and nostril were narrowed. The osseous septum narium was dislodged towards the right side. The teeth in the left upper jaw were quite healthy and fast. The slight prominence of the left cheek was caused by a tumour between the masseter muscle and the upper jaw. The left zygomatic arch was a little more prominent, and the lower part of the left fossa temporalis fuller than is commonly the case. Nothing morbid could be discovered in the orbit.

Other Surgeons who had seen this patient contended that it was a case of naso-pharyngeal polypus; but Professor Langenbeck argued against this opinion, that all tumours which are not cancerous, as, for instance, the polypi, grow in that direction in which the least resistance is offered by surrounding parts; and that therefore a naso-pharyngeal polypus would grow into the sinus frontalis, sphenoidalis, and maxillaris, and the labyrinth of the ethmoid bone, and might distend the walls of those cavities, but that it could not grow from the naso-pharyngeal cavity into the fossa pterygo-palatina, and round the upper jaw forwards. Others thought that a tumour in Highmor's cavity existed; but to this M. Langenbeck objected that the walls of that cavity were nowhere projecting, but on the contrary, its external wall was decidedly flattened. He therefore, before performing the operation, mentioned that the case was one of a fibroid of the fossa pterygo-palatina, which had grown from there through the foramen spheno-palatinum into the naso-pharyngeal cavity, the fossa spheno-maxillaris, and round the upper jaw between its external wall and the masseter muscle towards the mucous membrane of the cheek. He also said that the resection of the zygomatic arch, which he had done in a previous case, was sufficient for the extirpation of tumours which grew from the fossa pterygo-palatina into the fossa spheno-maxillaris and temporalis; but that, in this patient, in whom the tumour had penetrated from the fossa pterygo-palatina into the naso-pharyngeal cavity, the resection of the entire left half of the upper jaw was absolutely necessary. In order to avoid mutilation of the face, he intended trying to replace the upper jaw after the removal of the growth.

The operation was done on July 1, the patient being under the influence of chloroform. Two incisions were then made through the skin, the lower one of these from the place of insertion of the left ala nasi in the cheek, and through this towards the lower edge of the zygomatic arch, and along this bone to the middle of the zygomatic process of the temporal bone. The upper incision proceeded from the nasal process of the frontal bone along the lower edge of the orbit, and beyond the frontal process of the upper jaw to the middle of the zygomatic process of the temporal bone, where it met the lower incision in an obtuse angle. Without separating the skin from the soft parts below it, the operator then penetrated through the lower incision towards the jaw, cut through its periosteum, and separated the masseter muscle from the lower edge of the zygomatic bone. After the fascia buccalis, which was strongly prominent, had been cut through, a lobular, white, shining tumour became visible, which extended between the external surface of the upper jaw and the coronoid process of the lower jaw, towards the fossa spheno-maxillaris backwards. After the lower jaw had been separated from the upper one by means of a speculum, the tumour could without difficulty be removed from the upper jaw, and the left forefinger proceeding between the upper jaw and the tumour, could reach the fossa pterygo-palatina. As the upper jaw had been compressed by the tumour, and the fossæ spheno-maxillaris and pterygo-palatina were considerably enlarged, a slight pressure was now sufficient to allow the introduction of a fine elevatorium into the pharyngeal cavity. A fine and straight narrow saw was then introduced from without into the pharyngeal cavity, through the fossa pterygo-palatina, and the foramen spheno-palatinum; and the operator sawed through the whole upper jaw, from behind forwards, with a horizontal cut, while the left forefinger, which had been introduced into the pharyngeal cavity from the mouth, caught the point of the saw and prevented its touching the septum narium. The second incision through the skin was then likewise made down to the bone; the operator penetrated into the orbit and cut the soft parts in the angle between the frontal and temporal processes of the zygomatic bone. The second cut of the saw went from below upwards through the zygomatic process of the temporal bone, and through the orbital process of the upper jaw to the lachrymal bone. The resected jaw was now only connected with the left lachrymal bone and the nasal process of the frontal bone, by means of its nasal process, which had not been divided; and in this part the skin had also been left entire in order to allow nutrition to go on. Neither were the hard palate and the alveolar process of the jaw touched. The jaw was now raised by means of an elevator, introduced below the zygomatic bone. This was done without any difficulty, the jaw moving easily in the connexion with the left nasal bone and the nasal process of the temporal bone, as if it were in a joint, and was raised like the lid of a snuff-box, so that the zygomatic bone was nearly on the median line of the face; and the fossæ spheno-maxillaris, and pterygo-palatina, and the naso-pharyngeal cavity had thus become easily accessible. The peduncle of the tumour was now seen to be attached in the fossæ pterygo-palatina, proceeding from there towards each side; it was as large as a fowl's egg, and one part filled the naso-pharyngeal cavity; the other the

fossa spheno-maxillaris. The antrum Highmori, which had been opened by the horizontal cut of the saw at its inferior point, was empty and quite normal, although somewhat narrowed by the pressure of the tumour from behind and without. The peduncle of the tumour was then separated by means of a broad elevator from the fossa pterygo-palatina; the part, which was in the cavity of the pharynx, was then caught with a strong polypus-forceps, and drawn out. The foramen spheno-palatinum and the fossa pterygo-palatina were enlarged to three times their normal size. The tumour was then entirely removed; and nowhere could a perforation of the basis cranii be discovered.

The hæmorrhage during the operation was very considerable, on account of the dilatation of the arteries; but at the end it ceased spontaneously. Only the arteria spheno-palatina was tied at its entrance in the foramen spheno-palatinum, and the ligature conducted through the left nostril. After the wound had been most carefully cleaned, and the operator had again satisfied himself that nothing was left behind, the jaw was again pressed backwards into its normal position, and the places where it had been sawed brought into contact. The jaw showed a disposition to swing upwards to the nose, so that a slight pressure had to be exercised upon it before the wound was entirely united by means of iron sutures. Some cerate and a thick layer of charpie was then placed upon the wound, and fixed by a bandage. The operation had lasted nearly an hour. Much chloroform had been used, and the little patient had shown some excitement during the intervals of insensibility.

The further course of this case was very satisfactory. There was at first some fever and suppuration; but in little more than a fortnight the wound was quite healed. The appearance of the face was then nearly normal. The upper gum had quite regained its usual position, and there was no swelling of the soft parts; only the conjunctiva palpebrarum was a little puffed, but the eye did no longer protrude. There was imperfect palsy of the orbicularis muscle, and the eyelids could not be quite closed. Besides, the infraorbital nerve and the ganglion spheno-palatinum had been destroyed by the operation, so that there is, of course, anæsthesia of the parts animated by them. In all other respects it was a perfect cure; and it appears, therefore, that henceforward it is no longer allowed to remove the upper jaw in cases of this kind. We may well congratulate M. Langenbeck for having successfully completed—not only a novel operation of importance—one of the nicest and most difficult on record.

GENERAL CORRESPONDENCE.

ACCIDENTS AFTER CHLOROFORM.

LETTER FROM DR. KIDD.

[To the Editor of the Medical Times and Gazette.]

SIR,—The following case has been kindly furnished me by a Medical man in the London suburbs, and my opinion asked if it be a case of death from chloroform. I think not; it seems rather one of those unhappy cases for the Medical attendant where death from "shock," or obscure puerperal fever sixty hours after (as in many Surgical cases from erysipelas also making its inroad by vomiting) is too readily believed by patients' friends to be the vomiting and death of chloroform. Shivering or recurrent vomiting is always a bad thing in all these cases; but I entirely agree with the view entertained by Snow, that they are rather indications of some new disease setting in, and have nothing whatever to do with the previous exhibition of chloroform.

In the present case (we are all wise *after* an event) I think I should have trusted solely to the use of small doses of brandy and to a little champagne, which seldom fails to stop vomiting. I do not think, by the way, that the modern idea of alcohol not being oxidised interferes in the least with the well-recognised clinical fact of its usefulness in ever so passive a condition of the system, where we have this erysipelas or the typhus class of symptoms, or weak first sound of the heart, obscure puerperal fever, or nervous "shock" to deal with. Some persons now think that as the late Dr. Todd's theory on the action of alcohol has been upset by our friend Dr. E. Smith, the clinical facts will be destroyed also, but it is not so. We have many instances of bodies perfectly unchanged acting catalytically, and so, perhaps, of alcohol.

I am, &c.

Sackville-street, August 24. CHARLES KIDD, M.D.

S. H., aged 30, fair, stout build; until pregnant had never known pain, and was intensely frightened at the prospect. Before marriage (a year ago) had lived at home in all comfort; since marriage a great deal of anxiety. Had suffered from cough, with scanty tenacious expectoration for the few last months. Sleep of late indifferent. Called on me in the latter part of June, and I saw her at her home on June 26. Pulse regular; respiration the same. No emaciation, but great dread of her confinement; the administration of chloroform a *sine quâ non*—indeed she said over and over again that she could not go through it otherwise, and would not. Took exercise out of doors, and I met her out July 6, cheerful and easier of the hæmorrhoids, of which she had been complaining at the first.

On the evening of July 29 she sent for me. I found the pains irregular, and the result of an imperfect examination, coupled with great resistance, showed that the pains were as yet ineffective. I left her, and gave her liq. op. sed. ɱxv. At eleven o'clock, the next day, I found the pains worse; and examining at half-past twelve discovered full obliteration of the os uteri, and the head well in the pelvis. She now began to demand chloroform, referring repeatedly to my having assented to her having it. I therefore began to administer it, and continued it off and on until about seven, when the child was born. I used a thin cambric handkerchief, folded in a cone, and poured in from 20 to 40 minims by measure. It was always applied to her face, at first a little way off, and then closer; was only used as the pain came on, and was delayed as long as I could put her off. Complete anæsthesia was never attained, nor was she once completely insensible. Her pulse remained throughout perfectly natural—if anything increased in volume. The respiration natural; the cough in no way increased. Under it the pains did not diminish; the external parts became soft and moist, and she bore the pains well for her. When not so affected, she was very "vicious," nearly broke my fingers, and closed her legs and straightened herself with extraordinary determination. She frequently begged for a little chloroform to enable her to bear her pains, and directly I could I removed the handkerchief. Towards the conclusion, I placed a piece of lint on the handkerchief, and dropped the chloroform on it. The total quantity used was ʒiijss, of which I have no hesitation in affirming ʒj, at least, was evaporated independently of the patient—*i. e.* on the handkerchief, while waiting, etc. The placenta was removed without difficulty; the hæmorrhage insignificant. She expressed her delight and satisfaction at the action of the chloroform. During all this time she took nourishment in the shape of jelly, etc., and afterwards had an egg beaten up with brandy. I saw her about half-past nine in the evening, and found her very comfortable, expressing the greatest happiness at having had chloroform; said she should recommend every one to have it. Pulse regular; not accelerated; respiration easy; cough not increased.

July 31.—On my visit I found that, a few hours after my seeing her last night, severe sickness had commenced, and continued, and that her bowels had acted freely very recently; the pulse was quicker, and some little distress of countenance; eyes somewhat suffused, and a little occasional delirium; head hot. Cold to the head; nourishment; and a mixture of Acid. sulph. dil.; acid. hydrocyanic dil.; sp. æth. nit. One dose stopped the sickness; restlessness continued all day, and as evening came on a craving for sleep. I gave her a quarter of a grain of muriate of morphia with good result as regards sleep, and she woke at five o'clock next morning (August 1) feeling better, but soon she began to find the breathing much worse; the tenacious phlegm teased her. Pulse more quick; respiration also; heart's action unequal, and general signs of debility. I ordered Sp. æth. sulph. co. with oxym. scillæ and camphor, and in the evening ammonia effervescing, but she sank at seven in the morning on August 2, having retained throughout the last twenty-four hours a certain amount of consciousness varied with delirium. The discharge quite ceased on the 31st, but there was no abdominal distension or tenderness. The body rapidly discoloured after death, and became very dark over a considerable portion of it.

N.B.—I have since ascertained that before I first saw her she had had a little hæmoptysis. The nurse (so Mrs. H. said) frightened her very much with tales about various bad cases, etc., which made Mrs. H. more determined to have chloroform.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, August 29, 1861 :—

Cooper, Alfred, Norwich
De la Porte, William, China
Greene, Frederick William, Upton-park, Slough
Waylen, Charles William, Devizes

As an Assistant :—

White, Samuel Shapland, Barnstaple, Devon

The following gentlemen also on the same day passed their First Examination :—

Davies, William, London Hospital
Griffin, William Henry, Banbury, Oxon
McDiamid, Albert, Oakley-square
Roe, Edwin Hodgson, Eccles.

APPOINTMENTS.

ANDREWS.—John Andrews, M.R.C.S. Eng., L.S.A. Lond., has been appointed Consulting Surgeon to the Salisbury Infirmary, on retiring from the post of Surgeon.

BENSON.—Dr. James Benson has been elected to succeed the late Philip C. O'Reilly, L.R.C.S. Irel., as Surgeon to the Abbeyfeale Dispensary, Co. Limerick.

CLARKE.—Mr. Francis Winter Clarke, First M.B. Lond., M.R.C.S. Eng., L.S.A. Lond., has succeeded the late Wm. Leapingwell, M.D. Edin., M.R.C.S. Eng., L.S.A. Lond., as Medical Officer to the Fifth District in the Abingdon Union, Berks.

COUPER.—John Couper, M.D. Glasg., M.R.C.S. Eng., has been appointed Assistant-Surgeon to the London Hospital, to fill the vacancy caused by the appointment of Mr. Critchett to the post of Surgeon.

COURTENAY.—R. H. Courtenay, has been appointed Surgeon to the Ballinglass County Infirmary, vacant by the death of William Nicholas Heath, Fell. and L.R.C.S. Irel.

FISHER.—Henry William Fisher has been appointed Surgeon to the Fever Hospital, Statford, Ballinglass, County Wicklow, in succession to W. N. Heath, Fell. and L.R.C.S.I.

JACKSON.—Thomas Carr Jackson, F.R.C.S. Eng., has been elected Surgeon to the Great Northern Hospital, vacant by the resignation of William Scovell Savory, F.R.S., etc.

KIRKMAN.—Dr. John Kirkman (in practice prior to 1815), Physician to and Superintendent of the Suffolk County Lunatic Asylum, has been appointed President, for the ensuing year, of the Association of Medical Officers of Asylums, and Hospitals for the Insane.

MIDDLEMIST.—Mr. R. P. Middlemist has been elected Surgeon to the Westminster General Dispensary.

SMALE.—George Edward Smale, M.R.C.S. Eng., and L.S.A. Lond., has been appointed Surgeon in Ordinary to the Portland Town Free Dispensary, Henry-street, Portland-town, in the room of E. A. H. Head, M.B., resigned.

WOOD.—Mr. James Askey Wood, M.R.C.S. Eng, L.S.A. Lond., has succeeded the late Mr. T. Clewley as Medical Officer, for District No. 4 of the Ashby-de-la-Zouch Union, Leicestershire.

DEATHS.

BARNES.—August 23, John Barnes, of Stockport-road, Ardwick, Manchester, M.R.C.S. Eng., L.S.A. Lond., aged 63.

BOWDEN.—August 12, at Herne Bay, Kent, Richard Bayly Bowden, formerly of Star Cross, and afterwards of Dawlish, Devon, M.R.C.S. Eng., L.S.A. Lond., Commander R.N.

BROWN.—August 8, of yellow fever, at sea, between Trinidad and Grenada, on board the R.M.S. *Thames*, David E. Brown, of West Gorton, Lancashire, M.R.C.S. Eng., Surgeon in charge of the above ship, aged 23.

CARPI.—August 22, at Rome, Dr. Carpi, Special Physician to the Pope, aged 69.

COLE.—In July, William Cole, of the Medical Department, Hong Kong.

COVEY.—August 28, Edward Covey, of The Shrubbery, Basingstoke, Hants, Fell. and M.R.C.S. Eng., L.S.A. Lond., and Justice of the Peace.

DELMEGE.—September 1, at Clifton Vale, Clifton, Bristol, Collis Christopher John Delmege, M.D. Edin., M.R.C.S. Eng., L.M. Dub., Staff-Surgeon Major, on half-pay, aged 49.

GANNON.—August 27, at Clifton, John Gannon, Surgeon R.N. on the Retired List, (seniority July 6, 1827,) aged 73.

GRIFFITH.—August 21, Thomas Davies Griffith, of Amlwch, Anglesey, M.R.C.S. Eng.

HUNT.—August 29, James Hunt, of the Bridge-road, Hammersmith, M.R.C.S. Eng.

LOVETT.—August 21, William Lovett, of Royston, Cambridgeshire, Surgeon in practice prior to 1815, aged 65.

LOVEGROVE.—August 26, George Hymeneus Lovegrove, of Clarence-street, Gloucester, M.R.C.S. Eng., L.S.A. Lond., Senior Surgeon to the Gloucester General Infirmary, and Justice of the Peace for the City of Gloucester, aged 34.

MILLER.—August 28, at High-street, Ayr, William Miller, Student of Medicine, aged 22.

MILLER.—August 30, at Parkstone, Poole, Dorsetshire, William Miller, late of Corfe Castle, Dorsetshire, M.R.C.S. Eng., in practice prior to 1815, aged 80.

NEWSON.—August 8, at the Medical College, Epsom, Samuel Newson, late of Brewer-street, Surgeon, aged 73.

PAYNE.—August 13, George Brown Payne, of Manchester-road, Hyde, Cheshire, M.R.C.S. Eng., L.M., L.S.A. Lond., aged 29.

RUTTER.—August 14, at Cairo, on the homeward passage from Bombay, Theodore William Rutter, M.D. Univ. Glasg., M.R.C.S. Eng., Assistant-Surgeon 72nd Regt. of Foot (Duke of Albany's Own Highlanders).

STOKES.—June 18, by drowning, from being seized with cramp while bathing off the Point, near the Custom House, Port Natal, John Henry Stokes, M.R.C.S. Eng., Surgeon in charge of the *Barbadoes*.

WHITE.—August 17, after a few days' illness, Francis Thomas White, of Springwell House, Hayes, Middlesex, M.D. Univ. St. Andrews, M.R.C.S. Eng., L.S.A. Lond., aged 25.

WILSON.—August 29, at the Lion Mansion, Brighton, Francis Wilson, M.D., aged 71.

ST. MARK'S HOSPITAL, DUBLIN.—The governors of St. Mark's Hospital for the treatment of those labouring under diseases of the eye, have determined on extending the usefulness of that institution by enlarging its accommodation from twenty to thirty beds. The subscription-list shows the interest which some of the best men in the country take in its welfare. On looking over the list, we cannot refrain from noticing the names of several of the Medical Profession who have gracefully come forward to aid by their countenance and support this branch of the educational department of the Dublin School of Medicine.

COMPENSATION FOR INJURIES BY RAILWAY ACCIDENTS.—A meeting has been held of a number of shareholders interested in the principal Metropolitan Railway Companies to consider the subject of the awards of juries in cases of railway accidents, with a view of taking preliminary steps to petition the Legislature to restrict the compensation within certain limits commensurate with the injuries actually inflicted on persons or property. It was stated that one of the great Companies had disbursed last year no less a sum than 80,000*l.* by way of compensation for accidents on their line, exclusive of law expenses and the cost arising from damage to the rolling stock and the permanent way.

VITAL STATISTICS OF LONDON.

Week ending Saturday, August 31, 1861.

BIRTHS.

Births of Boys, 874; Girls, 851; Total, 1725.
Average of 10 corresponding weeks, 1851–60, 1624·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	577	550	1127
Average of the ten years 1851–60	600·9	586·2	1187·1
Average corrected to increased population	..	..	1164
Deaths of people above 90	..	..	3
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	1	10	..	8	7	14
North	618,201	2	1	7	5	9	12	39
Central	378,058	..	1	4	4	2	7	12
East	571,129	2	1	5	3	10	7	49
South	773,160	1	4	8	4	15	8	69
Total	2,803,921	5	8	34	16	44	41	183

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·995 in.
Mean temperature	62·5
Highest point of thermometer	80·0
Lowest point of thermometer	46·2
Mean dew-point temperature	54·2
General direction of wind	W.
Whole amount of rain in the week	0·00 in.

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Mr. Crutchley.—The qualifications are sufficient; but a *Surgical* qualification is always regarded favourably.

Discipulus.—The period between conception and quickening varies a good deal; about four months is the usual time.

A letter from Dr. Williams on Digitalis in Delirium Tremens shall appear next week.

J. J.—It is becoming every year of more importance to young Druggists to join the Pharmaceutical Society. The address of the Secretary is, at the Society, Bloomsbury-square.

B. P.—The extract of Podophyllum is equal in cathartic effect to extract of Jalap in half the dose,—in other words, the extract of podophyllum is twice as strong as extract of jalap. The podophylline is a resin, extracted by alcohol from the mandrake root. It is not the pure resinoid active principle of the drug. It is given in doses of gr. ½ to gr. j.

Subscriber.—Medical men are only attached to a few of our principal Embassies. The Foreign Secretary has the appointment.

Henry.—No part of Switzerland is suitable as a *winter* residence for a consumptive patient. The question should be put to the ordinary Medical attendant.

ERRATUM.—Page 158, column 2, line 8 from bottom, *for* "axis" *read* "axes."

A WEEK AT ST. THOMAS'S.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have no doubt it will be of interest to old St. Thomas's men, and to past Dressers, to know that their Alma Mater continues to afford abundant opportunities for the acquisition of practical Surgical knowledge.

I have lately been on duty as No. 1 Dresser, and I append a list of the operations and accidents during one week; this, I feel sure, will substantiate what I have stated above.

The *Operations* performed in St. Thomas's, from August 3 to August 10, were:—Lithotomy in the female; removal of tumour from coccyx; operation for strangulated femoral hernia, two cases; strangulated femoral hernia reduced by taxis; trephining, and elevating for fractured frontal bone; amputation of thigh; amputation of penis; reduction of dislocated femur; reduction of dislocated humerus, two cases; paracentesis abdominis, two cases.

The *Accidents* admitted into the Hospital during the same period were:—Fracture of tibia and fibula; fracture of femur; fracture of fibula; fracture and depression of frontal bone; strangulated femoral hernia, three cases; dislocation of femur into foramen ovale; dislocated humerus, two cases; injury to loins; severe scalp wounds, two cases; contusion of knee; hæmorrhage from varicose veins; hæmorrhage from gum; foreign body in ear; smashed hand.

The minor cases treated as casualties by the Dressers, in the out-patients' rooms, numbered 494; of these 200 were new cases and included—fractured fore-arm, 7 cases; fractured clavicle, 4; fractured ribs, 6; contused, lacerated, and incised wounds, 27; abscesses in various parts, 22; retention of urine, 7; amputation of finger; extraction of teeth, 60; sprains and contusions, 36; dislocated humerus, 3. These cases were treated by the Dresser, and were distinct from the Surgical out-patients, who are seen by the Assistant-Surgeon.

Trusting that you will pardon my trespassing on your valuable space,

I am, &c.

St. Thomas's Hospital, August 17. J. DODD SWALLOW.

SHOULD APOTHECARIES HAVE WINE LICENCES?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Knowing how indispensable it is, in the Medical treatment of diseases, that all wines should be of the purest description. I addressed a letter to the Chancellor of the Exchequer, urging on his attention the expediency of granting Wine Licences to Medical Practitioners (as well as Chemists) I quoted a precedent Act that allowed Apothecaries "to sell wine as a cordial." I now send you his answer, which you will do me the favour to publish; only remarking that a wine merchant allowed me the other day to taste an "iniquitous compound," which he assured me was made up for publicans and sold by them as port; its cost being one shilling and three pence per quart.

I am, &c.

J. B. (late 33rd Regt)

Sir,—I am desired by the Chancellor of the Exchequer to acknowledge the favour of your letter of the 27th instant, and I am to state that he appreciates fully the consideration in favour of such a measure as you propose, but Mr. Gladstone fears that the abuses to which it would lead constitute a fatal objection. I am, Sir, your obedient servant,

11, Downing-street, Whitehall, August 21. CHARLES L. RYAN.

[We are very glad that this attempt to add to the connexion between Profession and Trade has proved unsuccessful.—ED.]

A HINT TO THE AUTHORITIES OF THE LONDON MEDICAL SCHOOLS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Owing to my being now an elderly man, and the father of several sons, some of whom will, I trust, follow in my Professional footsteps, I have had many conversations with my senior friends upon the matter of Medical Education. However divided we may have been respecting the merits of individual schools, we have always been agreed upon one point—namely, that although all the schools can boast of good and able men as Lecturers, very few indeed possess any official to whom the students can apply when in doubt upon difficult questions, or whose duty it is to inspire confidence into the students, and induce habits of progressive study, by holding frequent examinations upon the various subjects of Professional value.

I would therefore suggest that each school should appoint, after due notice of their intention, and without showing favouritism to their own men, some gentlemen (not a Lecturer) to give a fair proportion of time to the duties which I have marked out, and which would not necessarily require residence, owing to which a Medical tutor is sometimes appointed, whose sole qualification is that he has not yet ventured to practise as a Physician or Surgeon upon his own account.

During my studies the "Sloughs of Despond" were not so numerous or formidable as they now are, but even then I should have worked, and so would my fellow students, with better courage and results, if some such official as I propose had existed at our Hospital School; the appointment would be looked upon with intense satisfaction by many parents, whose sons are thrown upon the great world of London without any one to guide them.

I am, &c.

August 30. AN OLD SUBSCRIBER.

A QUESTION OF ETIQUETTE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Having been lately called into consultation in a midwifery case by the Practitioner in attendance, in order to operate, I found the head presenting, face to pubis, the pelvic region large and fully developed, the mother of living children, the waters six hours discharged, the pains good and regular, the woman healthy and strong. I suggested the propriety of waiting a few hours longer, as the case might not require instrumentation. So I left, and returned in three hours, when I found that another Practitioner in the neighbourhood had called, applied the forceps, and delivered the woman, which, no doubt, the delay had rendered very easy, without having given me any notice.

Would you or some of your correspondents kindly inform me if this is the usual practice and *etiquette* in England, for in other parts it is not the rule?

I am, &c.

August 28. VIATOR.

MORE ADVERTISING.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following two advertisements appeared in the *Aberdeen Journal* of Wednesday, August 7:—

"Medical.—Dr. Watson, formerly Senior Surgeon of the *Great Eastern* steamship, will commence the Practice of his Profession in Aberdeen, on Monday, August 12. 75, King-street, Aberdeen, August 6, 1861."

"Patrick Watt, M.D., C.M. (University of Aberdeen), will commence the Practice of his Profession at Buxburn, on Tuesday first. Greenburn, Sclattie, August 6, 1861."

I suppose that Drs. Watson and Watt see no harm in following the example set them by the Honorary Surgeon to the Queen who advertises by circular at Woolwich.

I am, &c.

Bedford, August 29. A STAFF SURGEON.

COMMUNICATIONS have been received from:—

Mr. W. ADAMS; Dr. A. SIMPSON; Dr. SIEVEKING; Dr. MCWILLIAM; Mr. BULLEY, Reading; Mr. C. Heath; Mr. BULLEN; Dr. SALTER; Dr. GREENHALOH; Mr. H. SMITH; Dr. KIDD; Mr. ELLIS; Dr. D. M. WILLIAMS; and our Correspondents at Dublin, Manchester, Breslau, Bonn, Würzburg, Liepzig, Paris, Amiens, Florence, Vienna and Munich.

APPOINTMENTS FOR THE WEEK.

September 7. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

9. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

10. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

11. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

12. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

13. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in ſometimes removing the APOPLECTIC DIATHESIS in "perſons advanced in life. It is, moreover, worthy of obſervation, "that JAMES'S POWDER has been of remarkable utility in "certain inſtances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effuſion. Laſtly, in two caſes of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect ſucceſs."

Alſo *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S "POWDER, in caſes of undue determination of blood to the "head, is that which I have generally purſued. The patient is "made to begin with a very moderate doſe, not more than two "grains at bedtime, and to increaſe the doſe by half-a-grain every "night, until ſome ſenſible effect is produced upon the ſtomach, "bowels, or ſkin. Should the ſtomach be affected with ſickneſs, "the doſe muſt be leſſened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be adminiſtered than the ſtomach could "otherwiſe bear. If the ſkin is ſoftened, or the bowels affected, "the doſe ſhould not further be increaſed, but it muſt be repeated "every night for a conſiderable length of time: in ſeveral inſtances "I have known eighteen or twenty grains taken for a conſiderable "period without any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be ſuch as to require antimonial prepa- "rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery) ſhould be taken at intervals according to circumſtances."

In writing to Meſſrs. Newbery, he ſays:—

"I wiſh that your preparation was always uſed."

To ſecure the diſpenſing of the *original* preparation, which, for 114 years, has been ſold by the houſe of Newbery and Sons, in St. Paul's Churchyard, it is neceſſary to preſcribe it as "PULVIS JACOBI VER., NEWBERY'S," otherwiſe another article (wanting in the beſt properties, and recommended to be given in a different code of doſe, *though called by the ſame name*) may be ſubſtituted for the original medicine.

This ſubſtitution muſt bring diſappointment, and of courſe deter Practitioners from preſcribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

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This quotation admits of neither credit nor discount, and 1s. per gallon must be added for packages, to be allowed on their return.

HENRY BRETT and Co., Old Furnival's Distillery, Holborn.

Blancard's Pills of Unchangeable

IODIDE OF IRON.

Recommended by the Academy of Medicine of Paris,
And authorised by the Medical Council of St. Petersburg,
Extensively tried in the Hospitals of France, Belgium, Ireland, Turkey, &c.
Favourably noticed at the Universal Exhibition of New York, 1853, and Paris, 1855.

"Of all the modes hitherto proposed of administering iodide of iron in the pure state, I think Mr. Blancard's the best."—Chemistry applied to Therapeutics, by M. Mialhe, Deputy-Professor to the Faculty of Medicine of Paris, Pharmacien to the Emperor, 1856, p. 319.

These Pills stand now very high in the therapeutics of every country, as may be seen by the above quotations, and also by the numerous scientific articles in medical periodicals and works (a).

Being enveloped in a very thin resino-balsamic coating, they present the great advantage of not being liable to any deterioration, of having no taste, of being small, and not distressing the stomach. As they possess the properties both of iodine and iron, they are especially beneficial in chlorotic, scrofulous, tubercular, or cancerous affections, as also in leucorrhœa, amenorrhœa, anæmia, &c. &c., and they furnish the medical man with an excellent means of modifying lymphatic, feeble, and debilitated constitutions. Dose, 2 to 4 pills a day.

N.B.—Impure or altered Iodide of Iron is an unsafe remedy, and may even prove dangerous. Only such bottles as bear an electro-plated seal fixed to the lower part of the cork, and the signature of the inventor placed on a green label, are to be considered as prepared by Mr. Blancard. The public should beware of spurious imitations.

To be had at M. BLANCARD'S, Pharmacien, No 40, Rue Bonaparte, Paris. General dépôt in England at M. Gabriel Jozeau's, French chemist, 49, Haymarket, London. In the United States, at E. and S. Fougera, Chemists, 30, North William-street, New York. To be obtained retail from the principal Chemists.

(a) Bulletin de l'Académie de Med. 1850, page 1015; Gazette Médicale, Aug. 17, 1850; Union Médicale, Aug. 15 and 22, 1850; Gazette des Hôpitaux, March 15, 1853, and June 10, 1854; Gazette Hebdomadaire de Médecine et de Chirurgie, Aug. 31, 1855; Revue de Thérapeutique Médico-Chirurgicale, Feb. 15, 1855; Abeille Médicale, Revue Clinique; Repertoire de Chimie et de Pharmacie; Annuaire de Thérapeutique pour 1851, page 199; Orfila, Elements of Chemistry; Mialhe, Chemistry applied to Therapeutics, 1856, p. 319; Quevenne, Essay on the Physiological and Therapeutical Action of Preparations of Steel, page 97, 1854; Briche teau, Treatise on Chronic Diseases seated in the Respiratory Organs; Soubeiran, Treatise on Pharmacy; Dorvault, Officine, &c. &c.

ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT

The Grosvenor Place School of Medicine,

DURING THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.,

Surgeon to the Royal Orthopædic and the Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital.

Lecture II.

PHYSIOLOGY OF THE SPINE IN RELATION TO THE PRODUCTION OF LATERAL CURVATURE.

Mechanism of Motion in the Spinal Column and the Essential Difference between its Flexibility and the Free Motion allowed in the Moveable Articulations of the Extremities—Classification of the Joints of the Body: the Immoveable, the Moveable, and the Mixed—Articulations between the Bodies of the Vertebræ, Examples of the Latter Class—Comparative Anatomy of the Spinal Column in Relation to its Mechanism of Motion—Error of the supposed Analogy between the Articulations of the Human Spine and the Moveable Articulations of the Extremities—Situation, Form, and Functions of the Oblique Articulating Processes—Horizontal Rotation-Movement of the Spinal Column limited by the Oblique Articulating Processes—Lateral Flexion limited by Oblique Articulating Processes—Flexion in the Antero-Posterior Direction more freely permitted in the Lumbar Region—Flexibility in Different Regions of the Spinal Column—Ligaments and Muscles of the Spinal Column: Their Influence in Maintaining the Erect Position of the Spine and in Limiting and Directing its Movements.

Gentlemen,—Having given you in the last Lecture a general sketch of the anatomical construction of the spinal column, I will now briefly advert to a few points in the physiology of this complicated and important structure, with especial reference to the mechanism of motion, and the mode of production of spinal curvature. It is unnecessary for me here to make more than a passing observation on the important functions of the spinal column as destined to enclose and protect the great nervous centre—the spinal cord; and also to give attachment to those important appendages of the spine, the ribs which, together with the sternum, again enclose the cavity of the chest and protect the heart and lungs. In connexion with spinal curvature, however, it is essentially necessary to bear in mind the important office of this osseous framework of the body formed by the spine, ribs, and sternum, as affording attachment not only to many of the muscles which regulate the movements of the trunk and the extremities, but also to some of the most important muscles of respiration,—a function perhaps more than any other interfered with in cases of severe spinal curvature, in consequence of the connexion of the diaphragm and intercostal muscles with the spinal column and the ribs.

To proceed, then, with that portion of the physiology of the spinal column most intimately connected with our present inquiry, I will make a few observations on

The Mechanism of Motion in the Spinal Column, and the Essential Difference between its Flexibility and the Free Motion allowed in the Moveable Articulations of the Extremities.

In the mechanical construction of the spinal column, one of its most important features is that whilst it is admirably adapted to the erect position of man,—the great characteristic of the human race—a certain amount of flexibility is also provided for. I shall, however, presently show you that the extent of this flexibility, more especially in the lumbar and dorsal regions, has been very much overrated. But it is important for us to consider, in reference to the mode of production of spinal curvature, the precise manner in which flexibility of the spine is obtained; by what means it is limited and directed in adaptation to the requirements of the erect position of man; and to determine how far the movements of the spinal column are analogous to, or different from, the free motion allowedin the moveable articulations of the extremities.

These inquiries are the more especially necessary because some writers who delight in tracing the analogy of lateral curvature of the spine, in its mode of production, to the ordinary muscular contractions and deformities of the limbs, would assume a similarity in structure and anatomical arrangement between the articulations of the spinal column and the moveable articulations of the extremities; at least, such an assumption is necessary to their theory of the production of spinal curvature, and by some it has been very plainly expressed; but to me this appears an error which cannot be too forcibly pointed out.

M. Jules Guérin (a), in advocating his theory of spinal curvature which he holds to be essentially identical with club-foot, wry-neck, and other deformities, which have been ascertained to depend upon active muscular contractions, traces the analogy in causation rather than mechanism, but he necessarily assumes that the mechanism and physiological construction would permit the operation of such causes in the production of the phenomena of spinal curvature,—an assumption which I shall endeavour to prove is totally opposed to the anatomical and physiological conditions of the spinal column.

Dr. Little argues strongly in favour of the analogy between lateral curvature of the spine and deformities of the limbs,—not only like Guérin from advocating the identity of causation, but also from the supposed similarity in structure and mechanism. In his Lecture on Lateral Curvature (b) the heading commences with "Distortions of Spinal Column Analogous to Contractions in other Parts of the Frame," and in the same page he observes, "I have in the next place to treat of those distortions of the spinal column, which in their nature correspond with *contractures* in other parts of the frame. *Contractures* are those distortions which result from the operation of causes which *indirectly* affect the articulations. . . . . In the general remarks at the beginning of the last Lecture, I laid down the proposition that, having in the spinal column, bones, ligaments, and muscles, similar to those in other parts of the frame, we should expect to meet in the spine with similar pathological states."

My colleague, Mr. Tamplin, has even more precisely described the supposed analogy between the mechanism of motion in the spinal column and the free motion allowed in the moveable articulations of the extremities. "The general cause of lateral curvature," observes Mr. Tamplin (c), "is debility, unattended with disease. It is precisely analogous in its nature and cause to other deformities in other joints—viz., debility, or loss of tone; for example, that common deformity, knock-knees or inward inclination, of which so large a number are found in the report; the only difference is, that here we have but one joint instead of many." And again, at page 23, Mr. Tamplin observes: "The spinal column, as I have endeavoured to prove, differs in no respect, except in that of its position and the number of its articulations, from any other articulation;" and, at page 22, he also states, as a deduction from these postulates:—"The indications of treatment, therefore, are as simple in this as in any other distortion, or as in that of a common dislocation."

Now, a careful examination of the mechanism of motion in the spinal column has led me to form an opinion diametrically opposed to that expressed by the above-named authorities; and has also led me to differ as widely from the theories which they have propounded in explanation of the causes and mode of production of spinal curvature, as well as the principles upon which they consider the treatment of this affection should be conducted. Let us therefore examine this subject more closely, and first as to the—

Classification of Joints.

We know that anatomically all the articulations of the skeleton are arranged in three classes—viz. *the immoveable*, such as the articulations of the bones of the skull; *the moveable*, as in the knee, hip, elbow, and other joints of the extremities; and *the mixed;* and that the articulations between the bodies of the vertebræ, together with the articula-

(a) "Mémoire sur l'Etiologie Générale des Déviations Latérales de l'Epine, par Rétraction Musculaire Active." Par Dr. Jules Guérin. Paris: 1840.

(b) *Op. cit.* p. 358.

(c) "On Lateral Curvature of the Spine," page 21. Churchill: 1852.

tion at the symphysis pubis, and also that between the first two bones of the sternum, are always given as illustrations of the mixed form of articulations.

In the moveable articulations of the extremities, the joints possess a free and extended range of motion, the articular surfaces moving freely on each other as polished surfaces, but restrained within certain limits by strong ligamentous bands, as in the knee, hip, elbow-joints, etc.

In the mixed form of articulations—intermediate between the immoveable and the moveable—the joint-surfaces are not directly in contact with each other, but are connected by an intermediate substance, which will permit of some flexibility and yielding, *but not of surface play*; as, for example, in the articulations between the bodies of the vertebræ, the sacro-iliac articulations, the articulation at the symphysis pubis, and also that between the two first bones of the sternum. In all these articulations a layer of fibro-cartilage is placed between, and intimately connected with, the contiguous surfaces of the bones.

No other than this mixed form of articulation, in which all free motion and surface-play, such as we have at the knee and other moveable articulations of the limbs, is avoided, would be adapted to the erect position of man. If free motion existed between the vertebræ, not only would all the advantages of the solid osseous framework of the trunk be lost, but the erect position and equilibrium of the body could only be maintained by the strongest muscular effort; whereas, I shall presently prove to you that in consequence of the absence of free motion and surface-play between the vertebræ, as well as the mechanical arrangement of the oblique articulating processes, by which the vertebræ are locked one within the other, etc., the erect position of man is maintained by the smallest possible expenditure of muscular force as far as the spinal muscles are concerned; there can be no doubt that the erect position is that in which the spinal muscles are least in action.

In some of the lower vertebrate animals free motion and surface-play between the different vertebræ are especially provided for, and in their locomotion we see the great advantages of such arrangement; let us for a moment glance at

THE COMPARATIVE ANATOMY OF THE SPINAL COLUMN IN RELATION TO ITS MECHANISM OF MOTION.

In the lower vertebrate animals we see the flexibility of the spinal column at its maximum, and locomotion is principally or entirely performed by the flexion of the body upon itself, as in serpents, eels, etc. In serpents the spinal column is characterised by the ball-and-socket articulation of the vertebræ, each vertebra having one surface convex and the other concave; both being covered by a thin layer of articular cartilage, so as to allow of free surface play but as Dr. Carpenter (d) observes, "In proportion as distinct members are developed, and the power of locomotion is committed to them, we find the firmness of the spinal column increasing, and its flexibility diminishing."

Mayo (e) in his admirable description of the mechanism of the joints, observes: "The joints of the bodies of the vertebræ deserve to be particularly described. In fish, in which the spine is very flexible, the articular surfaces of the bodies of the vertebræ are so excavated, that when two meet they enclose a cavity, the shape of which may be called spherical. This cavity is filled with fluid which we will suppose to be incompressible, whilst the margins of the two vertebræ are joined together, by the intervention of a ligamentous substance which is highly elastic; (Mayo considers that ligaments "are very flexible, but have very little extensibility.") "Thus, a double ball-and-socket joint exists between every two vertebræ, each of which is capable of rolling in every direction upon the ball of liquid contained between the two. In the human spine the same type is followed, but with a provision for much less latitude of motion; the excavation is shallow, the central substance semi-fluid, and the surrounding fibro-cartilage is confined by ligamentous bands of a less elastic substance."

I quote these observations from Professor Mayo, because they appear to me especially worthy of attention, though like many other valuable observations made by that excellent physiologist and pathologist, they have either failed to attract the attention they deserve, or have been inadequately acknowledged.

In the most recent anatomical works (see Quain and Sharpey, pages 5 and 187), the bodies of the vertebræ are described as "in most instances flat on the superior and inferior surfaces," and the intervertebral cartilage is described as "a plate or disc of fibro-cartilage placed between the bodies of each pair of vertebræ." Yet in every drawing representing the vertebræ in section (see Quain and Sharpey, fig. 69, page 188), we see the concavity, or excavation, of the adjacent surfaces of the bodies of the vertebræ, and the elliptical form of the section of the enclosed intervertebral cartilage carefully figured by the artist. Modern anatomists appear to have especially overlooked the effect which the annular epiphyses, surmounting the margins of the bodies of the vertebræ, have in deepening the articular surfaces of the bodies of the vertebræ and to some extent assimilating them in form to the concave surfaces of the bodies of the vertebræ in fishes.

Having pointed out, in the preceding observations, the anatomical dissimilarity between the articulations of the bodies of the vertebræ in the human spine, and the moveable articulations of the extremities, I have also shown that those who would endeavour to trace the analogies between spinal curvature and deformities of the limbs, have entirely overlooked the fact that the existence of the intervertebral cartilage, destroys all anatomical analogy between the articulations of the spine and the moveable articulations of the extremities; in fact that, in endeavouring to trace such analogies, joints with the minimum of motion—speaking of free motion or surface-play—as in the spinal column, are compared with joints possessing the maximum of motion, as in the moveable articulation of the extremities, without the anatomical peculiarities which regulate the minimum and maximum of motion being considered, and merely because both sets of joints are liable in their flexions to produce deformities; and because their motions are to a greater or less extent regulated by the muscles, the causes of deformity in both have been assumed to be identical.

Of course in these remarks I exclude the articulations between the occipital bone and the atlas, and between the atlas and dentata; and need hardly remind you that here we have a true ball-and-socket articulation, and also a joint admitting of horizontal rotation, so that the head may possess the greatest range of motion in every direction.

If, then, there is no anatomical analogy, as far as the mechanism of motion is concerned, between the spine and the moveable articulation of the extremities, why should we endeavour, for the sake of any general theory, to trace out analogies between the curvatures of the spine and the deformities which occur at the moveable articulations of the extremities?—rather let us study the distortions of the spine by the light of the special anatomical peculiarities which belong to this complicated structure.

Some authors—and amongst them especially Dr. Little (f)—endeavour to support their arguments, in favour of the supposed analogy between the deformities of the spine and of the limbs, by reference to the well-established analogy in the liability to *disease* between the spine and the joints of the extremities; but this does not appear to me to assist the argument. We know full well the liability which exists in the spine to necrosis and caries of bone, ulceration (if it may be so called) of cartilage, to rheumatic inflammation of the ligamentous and other fibrous structures in the neighbourhood, etc.; and that to these affections the moveable articulations, including the joint-ends of the bones, are especially obnoxious; but whilst I would fully concur in tracing this analogy, and have myself advocated it more strongly than other authors, I would as strongly insist upon the difference, in their nature and mode of production, between the *deformities* of the spine and of the limbs, from the dissimilarity in the anatomical arrangement of the structures, and the mechanism of the joints in reference to the production of motion, which I have pointed out between the articulations of the spine and the moveable joints of the extremities.

I would, then, particularly desire to impress upon you the

(d) "Principles of Human Physiology." Third Edition. London: Churchill, 1846,—page 19.

(e) "Outlines of Human Physiology." London: Churchill, 1837. Page 336.

(f) *Op. cit.* p. 340.

fact that in the human spine we may, as Mayo observes, trace the ball-and-socket type of articulation in the joints between the bodies of the vertebræ below the second cervical, or dentata. We know that this form of articulation is calculated to give the greatest range of motion; and where so many of these joints exist, as in the length of the vertebral column in the human subject, the flexibility of the human spine would approximate to that of the spine of fishes, and would be as uniform in the different regions; but as this would be ill adapted to the erect position of man, we have both the lateral and the antero-posterior motions checked by the oblique articulating processes. Let us, then, a moment reflect upon

THE SITUATION, FORM, AND FUNCTIONS OF THE OBLIQUE ARTICULATING PROCESS OF THE SPINE.

I need hardly remind you that for the purpose of maintaining the direct connexion between the contiguous vertebræ, there are four oblique articular processes connected with each vertebra—two superior and two inferior—which, except in the two first vertebræ, project one on each side, from the junction of the lamina with the pedicle. The articular surfaces of these oblique articulating processes unlike the articular surfaces of the bodies of the vertebræ, are coated with a thin layer of articular cartilage, as in the moveable joints of the extremities, and directed in pairs backwards and forwards with varying inclination upwards, outwards, and inwards, in the cervical, dorsal, and lumbar regions. These surfaces are flat and smooth, and are held in close apposition by short and strong ligamentous bands attached to their margins, clearly indicating the very slender provision for free motion or surface-play between the articular surfaces.

In considering the mechanism of motion of the spinal column, it is especially important for us to observe that these oblique articulating processes are situated posterior to the vertebral canal, and therefore very far behind the bodies of the vertebræ. There can be no doubt that the special function of these articulating processes, beyond that of affording a direct connexion between contiguous vertebræ is, not to increase, but on the contrary, to limit and direct the motions—it would be more correct perhaps to say the flexibility—of the vertebral column in the different regions. This is opposed to the functions of the other moveable articulations of the skeleton, which are all special provisions for increased motion, but the necessity for this limitation in the vertebral column has been shown by the ball and socket type of the articulation between the bodies of the vertebræ and the necessary adaptation of the spinal column to the erect position of man.

Horizontal Rotation-Movement of the Spinal Column Limited by the Oblique Articulating Processes.—In many of the attitudes of the body there is an appearance as if a movement of horizontal rotation, or spiral twisting, were freely permitted in the spinal column; but, on a careful examination, it will be seen that this appearance almost entirely depends upon the horizontal rotation of the head above, and the twisting of the pelvis upon the hip-joints below, by which the base of the spinal column is rotated. The extremely limited extent of this movement in the spinal column itself may be tested by fixing the pelvis firmly in the sitting position, and then trying to twist the body, of course avoiding a false appearance of this motion by exaggerated movement of the shoulders and arms. In the articulations of the bodies of the vertebræ generally, the firm connexion between the surfaces of the bones and the intervertebral cartilages would, of course, prevent any surface-play, either in the direction of horizontal rotation or any other direction; but it is important to observe that, whilst in the mechanism of motion for the head there is a special provision for the movement of horizontal rotation by free surface play in the moveable articulation between the atlas and dentata, we find the form and arrangement of the oblique articulating processes especially adapted to limit the movement of horizontal rotation in the spinal column generally. Mr. Bishop observes (g), "The dentata cannot revolve on the succeeding vertebra, in consequence of the oblique articulating surfaces of the latter lying in one and the same plane. In the dorsal vertebræ the oblique surfaces do not lie in the same plane, but are directed so as to form portions of a conical surface about the axis of the body, whereby they are allowed a certain amount of twisting action. In the lumbar vertebræ the oblique processes are large, and their surfaces are excavated, and almost perpendicular to the upper surface of the body, so as to prevent any twisting, or spiral motion whatever, of the trunk about the axis. We have seen why the vertebræ cannot revolve about the axis of their bodies except in a limited degree."

When, therefore, horizontal rotation of the bodies of the vertebræ does occur as a morbid condition, as it invariably does in the so-called *lateral curvature* of the spine, and in many cases as one of the earliest and most important pathological conditions which, as I shall endeavour to prove to you, it must be our especial object to remove, it must necessarily be accompanied with some alteration in form of the articulating processes, and the manner in which this alteration in form is produced will be hereafter described.

Lateral Flexion of the Spinal Column Limited by the Oblique Articulating Processes.—If, as I have just stated, the horizontal rotation movement, or twisting of the spinal column, is more apparent than real, and that this movement is really very limited, whilst in some of the varied attitudes assumed by the body there is an appearance as if it were very freely permitted, I would now observe that the same may be stated with respect to the flexibility of the spinal column in a lateral direction. We all imagine the lateral flexibility of the spine to be very much greater than it really is, but a more careful examination of the mechanism of motion of the spinal column will convince us that even in the lateral-flexion attitudes assumed by the gymnastic exhibitors, now always before the public eye in theatrical performances, the appearance of lateral flexibility of the spinal column is chiefly dependent upon

1st. The obliquity given to the spinal column by tilting of the pelvis, and thus altering its base of support from the horizontal to an oblique or even vertical direction—a movement permitted by the ball-and-socket form of articulation of the hip joint; and,

2nd. Upon the free mobility of the head in all directions, which is permitted by the moveable ball-and-socket form of articulation between the occipital bone and the atlas.

In order to test this limited lateral flexibility of the spinal column, examine a man while standing naked before you, and direct him to bend his body sideways whilst you place your hands on the pelvis, resting on the crest of the ilium on each side. You will then find that he immediately drops his head to one side and shifts his pelvis; but if you check the least movement of the pelvis, and don't allow the head to be inclined beyond a line corresponding to the direction of the spinal column, and at the same time prevent any undue muscular movement of the scapulæ, you will find the flexibility of the spine in a lateral direction to be extremely limited. You will then be convinced that the graceful lateral postures which you have so often admired either in female dancers or gymnastic exhibitors, and have attributed to the flexibility of the spinal column, are almost entirely due to the ball-and-socket articulations of the hip joints and of the head.

These considerations are of more importance than might appear at first sight in connexion with the purely muscular theory of the production of lateral curvature of the spine, and the direct lateral movement of the spine supposed to characterise that affection. The explanation of the limited flexibility of the spinal column in the lateral direction, will be found in the form and direction of the oblique articulating processes which I have already described. Mr. A. Shaw observes: "If we attend to the natural structure of the spine, it will be seen that whilst we lean the body to one side, the pressure is thrown almost exclusively upon the articulating processes of that side; these processes, delicate as they are, being the only bony structures which check the lateral movements of the trunk" (h). The way in which these articular processes become altered in form, from the habit of inclining the body to one side, under the circumstances which produce lateral curvature of the spine, will be hereafter adverted to.

Flexion of the Spinal Column in the Antero-posterior Direction is much more freely permitted than lateral flexion, but an attentive observation of this movement of the spine, when carried to an extreme degree, as by the gymnastic exhibitors, etc., will convince you that the appearance of great mobility of the spine, either in the anterior or posterior direction, is

(g) *Op. cit.* page 28.

(h) *Medico-Chirurgical Transactions*, vol. xvii. p. 408.

largely contributed to by the free ball and-socket articulations of the hips and of the head, and that next to these articulations the largest share in the movement is taken by the flexibility of the cervical or lumbar vertebræ according to circumstances. As a familiar illustration, look at a boy in the game of leap-frog, when he is "*making a back*," as it is called in play-gound phraseology, and observe how much depends upon the head and neck being bent downwards and inwards,—the play-ground expression for which will probably occur to you. In this attitude you will also observe that the whole length of the spine is inclined forwards by the tilting of the pelvis upon the hip-joints, a movement which is increased in proportion as "*the back*" is lowered; but in this position, or in the more exaggerated one of making the fingers touch the toes whilst the legs are kept perfectly straight, or extended, a certain amount of flexion or bending forwards, takes place both in the dorsal and lumbar regions of the spine;—the anterior curvature in the lumbar region, so conspicuous in the erect position, is obliterated or to some extent reversed, and a posterior projection produced in the loins, whilst the natural posterior curvature in the dorsal region is increased. To produce these alterations in the form of the spine, there can be no doubt that the intervertebral cartilages are very much compressed anteriorly, and that a certain amount of motion takes place at the joints of the oblique articular processes. An examination of these joints will convince you that from the direction of their articular surfaces a greater range of motion is permitted in the antero-posterior than in the lateral direction, though it will be evident that very little motion at these articulations is required in consequence of their being placed so far behind the bodies of the vertebræ and also in consequence of the compressibility of the intervertebral cartilages.

Further to illustrate the flexibility of the spine, in the antero-posterior direction, in the loins, observe the difference in the form of the spine in the sitting and standing positions. In the sitting position the hollow of the loins entirely disappears, in consequence of the pelvis assuming a straight instead of an oblique position. The alteration in the form of the spine in these positions is very remarkable in cases in which the natural anterior curvature in the lumbar region is exaggerated in the erect position by tilting of the pelvis forwards, as we see it in cases of anchylosis of the hip-joint, with flexion of the thigh, after hip-joint disease; or even to a greater extent in cases of congenital dislocation of both hips (i). In some of these cases the tilting forwards of the pelvis is so great in the erect position that the sacrum is nearly horizontal, but nevertheless is made to assume almost a vertical direction in the sitting position, and thereby the exaggerated lumbar curve at once disappears, and the spine becomes straight in the lumbar region; or it may be even slightly bowed outwards. In the sitting position there can be no doubt that the intervertebral cartilages between the lumbar vertebræ, and more especially that between the last lumbar vertebra and the sacrum, must be compressed anteriorly to a very considerable extent. This flexibility in the antero-posterior direction, in the lumbar region, I would remark, constitutes the greatest difficulty in removing, by gradual mechanical extension, the deformity of the hip-joint which usually remains after hip-joint disease—viz.: flexion of the thigh, often at a right angle, associated with ligamentous anchylosis of the hip-joint. The leg may appear to be straightened when examined in the apparatus, and the Surgeon congratulates himself upon the result, but when the apparatus is removed, it will be found that the effect has been produced by increasing the tilting of the pelvis anteriorily, instead of straightening the thigh, and no real improvement, therefore, has taken place.

(To be continued.)

Alum and Rhatany in Saccharine Diabetes.—M. Demeaux in a communication to the Academy of Sciences intended as preliminary to a more detailed statement, declares that he has treated diabetes very successfully by means of calcined alum and extract of rhatany given in equal parts.—*Gazette Méd.* No. 31.

(i) Casts taken from cases of this rare affection may be seen in the Museum of the Orthopædic Hospital. And a complete statue of a well-marked case in a boy is in the Museum of St. Thomas's Hospital, where the boy was brought by Dr. Carnochan of New York in the year 1845.

ORIGINAL COMMUNICATIONS.

ON INCISION OF STRICTURE OF THE URETHRA.

By JAMES ARNOTT, M.D.

Notwithstanding the great attention and research which so common and so serious a disease as stricture of the urethra has naturally excited, it must be acknowledged that our means of removing it are, as yet, very far from being perfect. Those which are safe are often ineffieient, and those which are efficient are so unsafe as to render their use justifiable only when the patient is exposed to more hazard from the disease than from the remedy. An investigation, however, into the sources of this danger, has shown that it is not an inevitable concomitant of the essential part of the proceeding referred to; and the purpose of the present communication is to explain how, by employing in its performance an instrument constructed on an entirely new principle, danger may be altogether avoided.

Although a catheter or bougie will, in the majority of strictures, give great relief, this is rarely of long duration; and many cases occur, of an unyielding, irritable, or elastic nature, in which these means of dilatation are of little avail. A persistence in their use may, indeed, keep the urinary canal open to a certain degree, but as they do not subdue the irritation caused by the presence of stricture, the long continuance and extension of this irritation too often undermine the general health, and produce organic changes in the bladder, kidney, and other contiguous organs, which embitter and shorten life.

Incision of the stricture by a sheathed knife passed along the urethra, was, in former times, a practice occasionally resorted to. In consequence, however, of the rude and hazardous modes of effecting it, this kind of treatment fell into disuse, and at the time of the publication of my Treatise on Stricture, it was almost forgotten. What was there said and suggested on the subject, again brought it into notice, especially in France, and though the instruments employed for practising internal incision have been hitherto constructed and used on a bad principle, much good, on the whole, has resulted from the revival of this method of treatment.

The imperfections of these methods of internal incision led to Mr. Syme's improved external incision, which was proposed as a substitute for them. But the hopes once entertained that permanent relief from the effects of severe stricture could thus be obtained with safety, have not been fulfilled. As has happened with respect to some other Medical questions, the statistics published in favour of the perineal section have not been properly or fairly adduced. Although when employed in cases of little severity, and where dilatation would have sufficed, this operation has not often had an unfortunate termination, it has proved fatal in a large proportion of that severer class of cases in which alone its adoption is warrantable.

In France the perineal section has not been received as a substitute for internal incision; and so highly is the latter proceeding esteemed, that certain French writers speak of the palliative treatment of strictures by dilatation and its radical or curative treatment by this kind of incision, just as they discriminate between the mere tapping of a hydrocele and its effectual treatment by irritating injections. But although relief from successful incision may last longer than that afforded by dilatation, this difference of duration has not been the reason generally assigned for preferring it. It is only where, from the character of the stricture, relief could not be obtained by dilatation, that the majority of Surgeons have deemed themselves justified in having recourse to a measure which, though it has proved less hazardous than the perineal section, has by no means been without hazard. Internal incision has often proved injurious or fatal by hæmorrhage, infiltration of urine, and pyæmia. We are not indebted to its more zealous eulogists for our knowledge of these facts, but to the communications of impartial inquirers. M. Nelaton, for instance, whose position in Paris enables him to form a correct judgment on the matter, while admitting the necessity of having recourse to this proceeding in certain cases, states, in his recently published "System of Surgery," that "in

more than half the number" of incisions there is hæmorrhage, and often to an alarming extent. As this could not happen without the urethra being deeply or extensively cut, the other dangerous results can be easily accounted for.

If we reflect on the circumstances attending the most approved plan hitherto in use of cutting strictures from the interior, we cannot be surprised at these occurrences. The sharp blade having been protruded from (and at a considerable angle with) its sheath, after it has passed beyond the stricture, "is" (to quote some recently published directions) "firmly pressed on the floor of the urethra, and slowly and steadily drawn outwards about an inch or an inch and a-half." In this operation, the cessation of resistance to the progress of the knife furnishes the Surgeon with the only reliable means of judging whether the stricture has been divided or not; for the elasticity of the urethra, or the ease with which it may be stretched, renders any previous measurement of very little avail. Now, if the knife is not opened exactly at the back of the stricture, and shut exactly in its front, the sound portion of the urethra will probably be more or less cut by it, as it is almost impossible, in the curved portion of the canal, and at so great a depth, to keep the protruded blade precisely in its axis; and so long as the resistance to the extraction of the knife continues, the operator will suppose that the stricture is being cut. When, again, in the course of its retraction, the blade has reached the posterior part of a hard stricture, it will drag this to a certain extent forwards before penetrating it, and, in so doing, will cause a gathering into folds of the portion of the urethra immediately in front of the stricture, through which folds the knife will be apt to start on the completion of its way through the hardened textures, however straight its course may be.

If this exposition of the cause of the hæmorrhage, etc., be correct; if the mischief proceed from the sound portion of the canal being cut, as well as the non-vascular, consolidated and contracted part, it becomes a very important question, whether some method cannot be devised of cutting the latter part exclusively. If the division of the contracting tissues could be exactly limited, the objections to internal incision would be removed, and a great desideratum in Surgery supplied.

I have ascertained that this can be effected, either by employing a knife rendered so blunt as that, when employed in the usual way, it will only penetrate the part which is much pressed by it; or by employing a sharp knife in such a manner as that it will cut by pressure alone, or without any forward or backward motion. Both may be said to carry out the principle of incision being effected only on the application of great pressure.

In an essay on stricture, printed five years ago, I suggested an instrument of the first description; four years afterwards, Mr. Marshall proposed an urethrotome, closely resembling this instrument; and in March or April of the present year, a paper was read before the Academy of Medicine in Paris, by M. Maisonneuve, suggesting, for the third time, the application of the principle on which those were constructed.

In the *Medical Times and Gazette* for February 2 last, I described, and illustrated by an engraving, another instrument for this purpose, to which, as being very superior to the first, I shall, on the present occasion, confine my attention. It consists of a flat tube, about seven inches in length, to one end of which a narrow and deeply-grooved director is attached, adapted for entering the stricture. Three long steel rods or wires, of a size that will pass through the flat tube, and one of which has, for an inch at the end, been sharpened into the form of a knife, constitute the rest of the apparatus. When it is used, the sharpened rod is passed along the tube into the grooved director, from which it is then pressed transversely against the stricture by pushing one or both of the other rods or wires between it and the whole length of the side of the tube. A very sharp knife thus pressed directly against the stricture, if the breadth of the tube allows it to move through sufficient space, will cut by the pressure alone, or without any retractile motion being superadded; but if the space be too small for this amount of pressure, a blade not so keen is preferable, and then a slight backward or sawing motion is required, in addition to the pressure, for the incision of the stricture.

An an explanation has been given, in a foregoing paragraph, of the accidents which happen from the use of the common urethrotome, there will be no difficulty in comprehending why the new instrument must be perfectly safe. The knife in the act of cutting is parallel, instead of forming an angle, with the axis of the urethra; it moves in a small definite space, which may be precisely that occupied by the previously measured stricture; no dragging of the stricture is caused by its motion, or gathering of the urethra into folds, because both its direct or transverse pressure on the stricture, and the end of the flat tube, keep it in its usual position while the incision is being made; this motion is so limited, that even were it to displace the stricture, it would hardly be beyond the tenth of an inch; and, lastly, when the knife is pressed out of the groove, no injury can be received by the sound or uncontracted part of the urethra, because, by giving no resistance, it is only pushed aside by its edge. In fact, the incision is as exactly limited to the stricture as it would be if the urethra were laid open and exposed to the Surgeon's view. Unless the incision required should extend beyond its normal dimension, it is impossible to injure the sound portion of the canal, but the cases must be very few, if any, in which so extensive an incision is advisable. The sound portion may come in contact with the edge of the knife during incisions of strictures within this limit, but as there is no pressure upon it, there is no cutting.

The first case in which this urethrotome was used had been previously adverted to in page 18 of the Essay above-mentioned. It is there stated that the patient had laboured under stricture for many years, and that frequent dilatation was required to preserve a tolerably free channel for the urine, and thus prevent irritation of the bladder. This dilatation could never be carried beyond a very limited extent, and as there was constant impending danger from persisting irritation, the application of some auxiliary means had been frequently and strongly recommended. Relief, however, being always obtained for a time by the dilatation of fluid pressure, and as I could not *then* assure the patient that incision was without hazard, he preferred the safer, though less effectual measure. At last an urinary abscess formed in the perineum, and the urine spread from it to the scrotum. When I saw the patient, on his arrival from the country, he was prostrated by his sufferings. It was, notwithstanding, necessary to get rid of the urine and internal sloughs by extensive incisions; but as these were made under congelation in lieu of chloroform, the existing debility was not thereby sensibly increased. When the system had recovered itself from this perilous accident, the stricture was cut by the new urethrotome on two several occasions, with a few days' interval; and I was able afterwards to pass a flexible metallic bougie nearly twice as large as any that had been formerly used. Owing to the hard and callous nature of the stricture, the patient scarcely felt the cutting, and the loss of blood did not, on either occasion, exceed a few drops. When I examined the urethra, nine months after the incision, there was no recontraction, nor had there been any return of distressing irritation. The patient continued to pass, from time to time, the same sized instrument which I introduced after the last incision.

I will now add some remarks on the construction and mode of applying the instrument which a considerable experience in its use has suggested.

Although I have not had occasion to use so small an instrument, a steel director, appropriate to a very narrow stricture, could, no doubt, be made as small as the grooved staff commonly used in the perineal section. The knife fitting its groove must necessarily be very small, but if the knife be short, and if the supporting rod first passed under it be narrow, it will be sufficiently strong. There are few strictures, however, which cannot be previously dilated to the extent necessary to admit a larger silver director.

The flat tube to which the director is attached may have various breadths according to the degree of pressure desired. That which I have generally used is one-third of an inch broad. It must be remembered, however, that, generally speaking, it is only so much of the circumference of a stricture as is much pressed upon that will be divided by the knife; beyond this extent the pressure will be insufficient, and the stricture will yield to the knife instead of being cut by it. A knife separating from the director to the extent of two or three tenths of an inch, even admitting that the channel of a narrow stricture is completely filled by the director, will not, perhaps, penetrate to more than half this depth. It may be proper, therefore, to make several incisions in different directions. If the same instrument be employed for these,

the bulk of its director must be increased, in proportion as the canal is opened, by a coating of sealing-wax applied after the metal has been thoroughly cleaned and heated.

In many strictures, however, one incision will be sufficient; they will yield afterwards to dilatation. One would expect this to be especially the case in those consisting of an elastic band.

It is questionable whether, as respects permanence of relief, there is advantage from extending the incision through or beyond the whole substance of a stricture. In the perineal section the incision extends through the whole of the subjacent parts, and must necessarily have always one direction, whatever may be the situation of the opening through the stricture. The channel for the urine preserved afterwards by the catheter, must be formed as much by the soft and yielding adjoining parts as by the urethra itself; and the hardened tissues originally forming the stricture, will bear, therefore, but a small part of the pressure of dilating instruments. It arises probably from the increase of the morbid tissues being thus unrestrained, that strictures have sometimes appeared to be eventually more untractable after the perineal section than they were before.

When the tissues forming the stricture have, by length of its duration or other causes, become of a cartilaginous hardness, repeated strokes of the knife may be required for its division. This can be easily effected by the new instrument, and by it alone.

Although tissues when so consolidated can hardly be infiltrated by urine (and it is in such cases that incision is especially appropriate) I have, nevertheless, as a precaution against the possibility of such an occurrence, generally recommended that a catheter should be occasionally used during the two succeeding days. A large bougie, a fluid dilator, or the dilator constituted by a modification of the new instrument itself, should be daily passed for some time afterwards, to prevent the adhesion of the cut surfaces.

The ordinary mode of using this apparatus is as follows:—It is satisfactory, though not absolutely necessary, to have made a previous examination of the stricture, and to have ascertained its length and the situation of its channel as respects the axis of the urethra: its distance from the orifice should be marked on the flat tube. Then, having warmed and oiled the instrument and inserted the blunt rods in the tube in such a manner that one of them, having its end of a wedge-form, may, when protruding from the tube, afford a sloping surface, it is introduced into the urethra. As soon as the grooved director has been lodged in the stricture (which may be ascertained, amongst other ways, by noticing when one or both rods are forced backwards), the outer one is withdrawn, and again pushed into the tube on the other side of the remaining rod so as to press this outwards. If there is a difficulty in doing this; if the patient feels the rods distending the stricture; or if the instrument be firmly fixed in the urethra after the second rod has been inserted, there will be little doubt that the director has been properly placed, and that it is of a proper bulk. If none of these circumstances are present, it must be inferred either that the director is not within the stricture, or that it fills its channel so imperfectly, as to render it probable that the knife when introduced will not be pressed with sufficient force against the stricture to cut it. When the Surgeon is satisfied that the instrument is properly placed, both of the blunt rods are to be withdrawn, and the sharpened one is to be passed along the groove as far as is deemed necessary. Then, while the instrument is held so that its axis may correspond with that of the urethra, the knife is pressed or driven against the stricture, by passing one or more blunt rods or wires between it and the side of the tube. If this pressure be alone insufficient to effect incision, it is necessary to give the knife a slight retractile or outward motion, after which it is pushed again into the groove and extracted. The case with which the knife has moved, its being soiled with blood, and the facility with which the blunt rods can again be introduced, are all evidences that the stricture has been cut. If these be wanting, the presumption will be that the stricture is peculiarly hard or very elastic, and that it will be necessary, in order to divide it, either that the knife should be repeatedly drawn over it, or be applied with greater pressure by means of a broader tube.

I trust it will not be supposed, from my having thought it advisable to give such minute directions, that this proceeding is one of difficult execution. But, as the most simple surgical operation may be so imperfectly performed as to prevent the attainment of its object, I am anxious to prevent such a result by mentioning everything of importance relating to an instrument which has little in common with other urethrotomes. Besides, several of the above observations regarding incision by this apparatus have an equal bearing on the employment of those modifications of it which furnish us with an excellent dilator of ex-centric action, and a certain mode of applying caustic to the front or the channel of a stricture. For it must not be forgotten that, however valuable a perfectly safe mode of cutting stricture may be in those cases which resist dilatation, it ought not to be had recourse to until this has been properly tried and found inadequate; and it ought also to be borne in mind that, when incision has been employed, it is necessary to maintain the benefit resulting from it by the occasional use, for some time at least, of the most efficient means of dilatation.

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ON THE

TREATMENT OF CERTAIN FORMS OF PROLAPSUS ANI WHERE THE LIGATURE IS NOT ADMISSIBLE.

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In the *Medical Times and Gazette* for November 17 are some observations on the most efficient means of treating severe cases of prolapsus of the rectum where the ordinary method—by the ligature—could not be adopted. I entered at some length into the pathology of the disease, and described the varied conditions under which it is so frequently met with. It was particularly insisted upon that prolapse of the rectum was associated, in many instances, with some serious organic mischief, and that the use of the ligature in such cases would be attended with considerable danger. In lieu of the ligature I recommended a combined method of treatment—viz., the application of nitric acid to the prolapsed membrane, and subsequent removal of transverse folds of integument from around the margin of the anus. I purpose now to detail a few cases where this plan was carried out:—

A gentleman, aged 54, was sent to me on December 7, by Mr. Fereday, of Dudley, who, in a letter which the patient brought, informed me of the existence of some organic disease, and the appearance of the gentleman at once indicated something more serious than a prolapsus of the rectum, however serious. There was a lividity of the face, and an amount of dyspnœa, which betokened something wrong with the heart or lungs. He informed me that, for several years, he had suffered from prolapsus of the rectum, which had been preceded by hæmorrhage for some time. This symptom, however, had passed by. During the last two years his prolapsus had become so much worse, that he was in almost continual suffering, the bowel not only protruding at the closet, but coming down when he began to walk about. The pain after his evacuations were very severe, and he was not always able to control them. Moreover, as soon as he returned the protruded bowel, it came down again, and the consequence was, that he could not sit without pain, and has latterly been rendered quite wretched from this cause alone, without taking into account his other ailments. On examination, after the exhibition of a copious injection, I found a large quantity of the mucous membrane of the rectum protruded. It was highly vascular, somewhat thickened, and in a granular state. There were no distinct hæmorrhoidal tumours. Around the prolapsus externally was a large quantity of thickened and relaxed integument, and the anal orifice itself was very capacious, and the sphincter was much weakened.

On examining him generally I found that he suffered, on slight exertion, from difficulty of breathing, and that the action of the heart was very irregular, the pulse being frequent, weak, and intermitting. He informed me that, not long since, he had suffered from œdema of the legs, and that his liver had been much enlarged, but that both these latter symptoms had become much decreased. It was hoped that, as his general health had been improved, the prolapsus would give less trouble, but the contrary took place, and accordingly

Mr. Fereday submitted the case for my opinion as to how far, in such critical circumstances, any operative proceeding would be justifiable.

I informed the patient at once that the prolapsus was so severe that the only mode of treatment which would effect a cure was the ligature, but that in his damaged condition I could not recommend it, as it would of necessity be attended with considerable danger to life; but that I would adopt a proceeding, which would, in all probability, give great relief, and which would be unattended with danger. I, however, informed him that in such a bad case he must not expect the same cure as would follow the ligature. He determined to undergo the treatment proposed, and accordingly on the same evening I gave him an injection, and having got the prolapsed membrane well down, applied the strong nitric acid to it very carefully.

9th.—He suffered pain for two or three hours after the acid had been applied, but on evacuating the bowels this morning the pain was gone, and the protrusion was less. I therefore applied the acid freely again this evening.

11th.—A severe attack of vomiting and retching—to which he has been subject—followed the application of the acid, but it has subsided, and the protrusion is less.

13th.—This day I removed from around the anus the thickened folds of skin and mucous membrane, by making four separate incisions at right angles to the orifice, dipping the points of the scissors well inside the sphincter: a good deal of oozing of blood followed this operation, but it was arrested by returning the protruded membrane well within the sphincter.

16th.—The bowels were opened to-day by castor oil, only a slight protrusion occurred and it was readily replaced.

19th.—The bowels having been well acted upon by castor oil, and the mucous membrane having been protruded, I again applied the nitric acid. I find the wounds made in the operation are nearly healed.

22nd.—I applied the acid again.

24th.—The bowels were operated upon naturally—the first time this morning—the protrusion returned almost immediately by the pressure of the sponge; the wounds made by the scissors are quite healed.

26th.—I applied the nitric acid for the fifth and last time to-day, after the bowels had been well acted upon by castor oil, the protruded membrane returned immediately with the least pressure, the sphincter ani contracts in a much more healthy manner. He is to return into the country in a day or two. I have desired him to take a dose of sulphur in milk at night in order to get a regular action of the bowels, to bathe the anus with the sulphate of iron lotion, and to pass a bougie every day after an evacuation.

In a month after his return, this gentleman wrote to me, "I have much cause to be thankful for the freedom I already enjoy from sufferings so long before endured," and two weeks afterwards he again wrote to me saying, "You will, I am sure, be glad to hear that since I last wrote to you I have several times walked from one to two miles without causing any return of my recent complaint," and after referring to the annoyance still caused by his dyspnœa, he says: "I am, however, quite a new creature," and with regard to the object aimed at by the treatment of bracing up the parts and getting the sphincter to a more healthy condition, the following remark shows its efficacy. It refers to the bougie, after the employment of which, he says, "The immediate contraction of the parts is so great that I have some trouble to get the bougie out again."

It is impossible, by any description, to give a fair picture of the distress which was caused to this poor gentleman by the constant and continued descent of the bowel, and therefore the relief of which he wrote in such thankful terms was especially gratifying and striking; and I could not bring forward a case better calculated to illustrate the importance of having some means as a substitute for the ligature where this treatment could not be put in force without great danger to life. It is a maxim, recognised, I believe, by all Surgeons of experience, that when there is any organic disease existing either in the viscera of the abdomen, in those of the chest or in the brain, the operation of the ligature should not be performed; for whatever be the explanation of the matter, there is not a doubt that the stimulus of the operation sets up an increase of disease in the organs already affected, and may destroy life. A remarkable instance of this I mentioned in my last paper, and I think it very likely that had I applied the ligature in the case just detailed, some fresh disease would have been excited in the liver or heart, and a fatal result might have ensued. Had not we possessed any other means of remedying the very severe prolapsus, this patient must have lived in misery, and have been content with the use of mere palliatives which had already been exhausted upon him.

There are one or two details connected with the treatment of this case which it may be well to allude to more particularly. It will be seen that I applied the nitric acid both before and subsequent to the removal of the pendulous folds around the anus. I generally recommend the nitric acid to be used first, and the treatment to be finished by the employment of the scissors; but this gentleman, although he bore the treatment with courage and patience, had a great dread of that part of this proceeding, and therefore I hurried it on more quickly than I generally do. It is better to avoid using the nitric acid afterwards if possible, because the wounds made by the cutting instrument are likely to be disturbed and re-opened by the attempts of the patient to bring the bowel down and by the manipulations of the Surgeon; but if there be a doubt about the matter, it is much better to apply the nitric acid on one or two occasions after the use of the scissors than to leave any of the protruded membrane thoroughly untouched. This lesson was forced upon me by a very unpleasant circumstance in my practice, where I treated a severe prolapsus on the same plan. I applied the nitric acid on one or two occasions before the loose folds were cut away, and as I thought sufficiently, and did not apply it afterwards. The consequence was, that in a few days after the treatment was, as I supposed, properly finished, some of the symptoms returned nearly as badly as before, much to the annoyance both of my patient and myself. This accident, however, happened before I had had the experience of the treatment I possess now. If the nitric acid be applied with care, it gives but little pain and does no mischief. It therefore may be used on several occasions, if necessary, without rendering the treatment very severe.

There is one other point to which I wish to allude, and that is as to the use of the bougie after the treatment was finished. This is a most important matter to attend to, and should not be neglected either after the use of the ligature or after the plan I adopt; its daily introduction after the evacuation of the bowels assists in replacing any portion of membrane which might be protruded, and the pressure of the instrument exerts a most beneficial action on the parts, preventing return of the disease. The use of a bougie is also beneficial in this way, it prevents the possibility of too great contraction of the anus occurring. This stricture might occur if the operation is not done with care, or if too much integument is cut away; and in my work on the rectum I have mentioned a case where an ill-judged and badly-executed operation was done by a Physician-Accoucheur, and was followed by severe contraction of the anus. Had a good-sized wax bougie been used in this instance for some time after the operation, this sad mishap would not have occurred.

I will now detail another instance showing the value of my mode of treatment where the ligature would have been out of the question.

I was requested by Dr. Tunaley, on January 6, to visit with him an old naval officer who was in his eightieth year, in very good health with the exception of a prolapsus of the rectum, with which he was confined to his bed. On examination I found a considerable tumour consisting externally of thickened and pendulous folds of skin, and internally of flaps of mucous membrane prolapsed in a very vascular state and not thickened. The history of this case was like that of many others: he had had the disease for many years, and had worn a very well made truss which generally kept the bowel up, but a few days before I saw him, as he was walking out, the bowel prolapsed by the side of the truss and he could not return it. Severe symptoms came on, he was treated by Dr. Tunaley for some days, and the parts having become more quiescent it became a question as to whether something effectual might be done. At such an advanced age it was of course out of the question to apply the ligature, but I stated to Dr. Tunaley my views about the combined operation with the nitric acid and scissors, and it was determined to put the treatment in force. Accordingly, the bowels having been previously well acted upon, I applied the nitric acid to one

portion of the prolapsed membrane; the application produced scarcely any pain at the time or afterwards.

8th.—The nitric acid was applied freely to the other portion of prolapsed membrane; this was not productive of any suffering.

10th.—The acid having been found to have acted well in diminishing the prolapsus, I first benumbed the part with ice and salt, and then removed four flaps of the thickened integument from around the anus.

12th.—Patient has only suffered very slightly. Wounds are healing well, and there has not been any prolapsus.

15th.—Bowels have been well acted upon by castor-oil without the occurrence of any prolapse. The wounds have almost entirely healed. I recommended him to take an electuary occasionally, and to pass a wax bougie three times a-week.

26th.—I heard from Dr. Tunaley to-day to the effect that our patient was quite well, and had had no unfavourable symptom whatever.

I have narrated this case because it illustrates the value of the treatment adopted where a condition obtains, viz. that of extreme old age, which is generally considered by most Surgeons as forbidding the employment of the ligature. Had there not been some other means at our disposal this old gentleman, who was for his time of life a remarkably healthy man, would have been compelled to suffer great discomfort for the rest of his days; for it will be seen that his truss had failed to give him that relief which it had done for some time. And I do not think that any Surgeon would like to recommend the employment of the ligature in a person eighty years old, however free from disease his internal organs might be; but the combined proceeding of nitric acid and the use of the scissors is so free from danger that it may be recommended with the greatest confidence even in persons of very advanced age. It is true that sometimes it will happen that we are obliged to submit our patient to the ligature even when they are at a time of life when such a proceeding becomes very hazardous; but there are exceptional circumstances which render it necessary.

It will be seen that the instances detailed above were uncomplicated, though severe instances of prolapsus of the rectum, and about which there cannot be any doubt in the minds of those Surgeons who have witnessed this treatment, as to the beneficial results which will ensue from it when undertaken with care. But cases will every now and then present themselves, in which the prolapsus is complicated with the existence of hæmorrhoidal tumours, and, indeed, seems to be entirely produced by their mechanical weight. In such a case there is really some difficulty in knowing what to do when there is a contra-indication to the use of the ligature in the existence of some organic disease or old age. But I am glad to say that even in such a case I have found the proceeding adopted in the uncomplicated instances followed by very beneficial results.

A gentleman, aged 70, consulted me on June 7. He informed me that he had suffered with piles and prolapsus for seven years, and that he had tried various remedies, but latterly the disease had increased, and become very inconvenient, in consequence of his not being able to return the bowel properly, so that, immediately he began to walk about, protrusion took place. On examination, I found that a protrusion was easily produced by the patient straining, and that it consisted of a large portion of the mucous membrane on either side, but slightly changed in its character. In addition to this, and just within the sphincter, were two or three distinct hæmorrhoidal tumours, evidently of old standing. They were of a blue colour, chiefly venous, and there was no tendency to bleed. The anal orifice was very capacious, and the integument around was loose and abundant. This gentleman would not hear of the ligature, so I told him that I would do my best to get rid of the prolapsus at all events, but that I was afraid I could not destroy the hæmorrhoidal tumours. He readily acceded to submit to the treatment proposed, and accordingly, on the same evening, I applied the nitric acid to a portion of the prolapsed membrane.

June 11.—The acid caused no pain, so I applied it to another portion of the diseased membrane.

15th.—No suffering produced. He says the prolapsus is less, so I applied the acid again.

19th.—I applied the acid again freely.

22nd.—Prolapsus less. I this day excised from around the margins of the anus, three triangular folds of loose skin. There was no bleeding, and in the course of a few days the wounds healed up. He was for some little time a good deal annoyed by the hæmorrhoidal tumours descending whilst the bowels were evacuated, and getting nipped by the now tightly contracting sphincter; but he wrote to me as follows, a month after his return into the country:—"The prolapsus seems cured, at all events it causes no inconvenience. The piles are frequently troublesome after much walking, but less so than formerly; and they are either considerably smaller, or at least, they do not protrude so much. I am sure, sir, that you will be gratified to learn that your skilful treatment has been attended with results, so far good, and as far as I can see, likely to be lasting."

Now, I must confess that this report was more favourable than I could have anticipated, for although I expected a diminution of the prolapsus and a more natural condition of the parts altogether, I did not think I should hear that the prolapsus seemed cured, for the hæmorrhoidal tumours not being of that nature which would be remedied by nitric acid, and not daring to cut them off, I saw that they would probably hinder the good results of the treatment, but although my anticipations were to a certain extent verified, the words of the patient himself are the best evidence, that a very considerable amount of benefit had ensued from the remedial measures employed. The chief part of this benefit was, I doubt not, produced by the removal of the loose folds of skin around the anus, as the orifice was remarkably capacious.

It must be understood, however, that I do not recommend this plan of treatment in such cases of severe prolapsus attended with distinct hæmorrhoidal tumours, for unless the latter are got rid of, the prolapsus in general will persist; still, if the orifice of the anus is very capacious, and the integument around it is very relaxed, the operation of removing three or four transverse slips subsequent to the employment of the nitric acid, will produce so much contraction of the parts, that the prolapsus may be almost entirely removed.

If space permitted, I could relate other cases where the combined treatment by nitric acid and subsequent removal of the loose tissue around the anus, had been attended with excellent results; but I think it is not necessary to go into the particulars of other cases, and I will conclude my observations by a few directions as to the detail of the treatment, and the conditions under which it should be applied. And in the first place I must again distinctly state that my object is not in any way to discard the ligature in those cases where there is no contra-indication to that proceeding. I look upon it as most efficient, productive of remarkably little suffering and danger when properly performed, and giving much less trouble to the Surgeon than the other plan; but when from the causes mentioned, ligature cannot be adopted, the treatment in question may be put in force. In order, however, to obviate failure, which is very likely to occur, attention must be directed to one or two points. It will be useless to attempt to do any good with nitric acid in those cases where the prolapsed membrane has become much indurated and thickened, or where conjoined with the prolapsus, there are two or three large hæmorrhoidal tumours of a blue colour prominent and well defined. If the ligature is not admissible, or the patient will not submit to it, the best plan will be, in such a case, to trust to the effect of removing the folds around the anus, but the incisions must be more extensive, and half an inch or more of the diseased mucous membrane should be removed in at least four different directions, and as Mr. Syme tells us, this operation alone may be attended with effectual relief, but when the mucous membrane is very voluminous, and the muscular tissue of the bowel is prolapsed as well, failure is likely to follow this method. In such a case, the only thing to suggest is, that the patient should wear a well-made pessary, which will give great comfort.

When the mucous membrane is not indurated, is highly vascular, and readily bleeds, however voluminous it may be, the nitric acid, if sufficiently and carefully used, will almost unfailingly do good, sometimes the prolapsus will quite disappear; whilst in others the only symptom of benefit is the readiness with which the part is reduced by the patient after the bowels have been evacuated. When this is the case, we may be certain that the remedy is acting well, and it should be repeated until the whole diseased membrane is touched.

The second part of the operation, consisting in the removal

of the loose folds around the anus, requires great care and nicety. It should be practised a few days after the last application of the acid in the following manner:—Whilst the patient is kneeling on a chair or lying on the side of the bed, whichever gets the best light, the Surgeon seizes a fold of the loose integument with either a pair of broad-bladed dressing forceps or an ordinary hooked forceps, about half-an-inch from the anus, and holding the fold well up with his left hand he takes a very sharp pair of scissors, curved on the flat and beginning his incision from the outside, excises the part, carrying the point of the scissors well into the anus so as to remove portions of mucous membrane as well as skin—thus the incision is made transversely and not longitudinally, as recommended by Mr. Curling and Mr. Quain. I generally make three or four such incisions. The effect of this is to produce a healthy and permanent contraction of the anus and lower part of the rectum, so that the good result already produced by the nitric acid, and which is not sufficient of itself to remedy the disease when severe, will be greatly enhanced, and nearly as good a cure will follow as if the ligature had been used. What will not take place if only one of the measures is adopted, will be produced by the combination of the two methods—just as in like manner we find that one drug, however powerful, will fail to produce any good effect, whilst a combination of two or more possessing similar qualities will accomplish the object desired.

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CASE OF GANGRENE OF BOTH FEET FROM FROST-BITE.

By HENRY ST. JOHN BULLEN, M.R.C.S.,
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Thomas T., aged 44, was admitted into the Infirmary of Lambeth Workhouse on the 13th of January, 1861. He was suffering from "frost-bite," which had attacked both feet, and had also affected the lower third of both legs. His aspect was anæmic, and frame emaciated, his occupation that of a tailor; and from his own account, his time, previous to his admission, had been chiefly passed in wandering about, seeking for employment, and apparently without success. During this period, which lasted some weeks, his diet had been confessedly scanty, his feet ill-shod, and in addition to these depressing causes, it was subsequently discovered that his habits were intemperate, and that he had endured much exposure to the night air of the late severe winter.

On his admission his feet and legs were observed to be pallid, bloodless, and felt extremely cold when touched. He did not complain of pain, which had been severe, but which had ceased, comparatively, previous to his admission. In point of fact, there was little or no sensation at this time about the feet.

The treatment adopted was stimulating, and a generous diet and wine were freely allowed. Locally, linseed-meal and bran poultices were kept constantly applied to the feet, and he was placed in a bed in a warm room, at no great distance from the fire. About a week after reaction came on, attended by fever of a hectic character, and both feet gradually assumed a more natural appearance, and were warmer to the touch, and some slight sensation, connected with the toes, was manifested. As this increased, pain increased also, and Mr. Heath, of Westminster Hospital, who saw him at this period, recommended the use of pil. saponis c. opio, gr. v., every four or six hours. It was found, however, impracticable to give this medicine oftener than twice in the twenty-four hours, otherwise so much somnolency was induced as to interfere with his taking his meals. The hectic fever and sweats were combated with quinine, and the man's condition was, for a short time, eminently favourable.

It soon became evident, however, that this improved appearance was delusive, and that the reaction would terminate in gangrene. The diseased parts were becoming offensive, their tinge deepening into black, and it was obvious that they could not be saved. As soon as a line of demarcation was formed between the unsound and healthy parts, and which occurred, fortunately, at nearly equal distances in both extremities, viz. at the lower third, it was agreed that amputation should be performed as near as possible at this spot, by dissecting up the granulations and soft tissues as far as possible, without injuring the vessels, and then sawing through the bones. Both legs were accordingly removed on this plan, on February 13, by Mr. Heath and myself, in the presence of, and assisted by, Mr. Hulke, of King's College Hospital. The case went on favourably up to March 15, and the stumps were fast healing, when a sudden attack of bronchitis, attended with much congestion of the lung, supervened, and the patient died on March 18.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CONDUCTED BY
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AND BY
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ROYAL LONDON OPHTHALMIC HOSPITAL.

It had long been suspected, even prior to our knowledge of the ophthalmoscope, that inflammation of the iris was not the only form of disease to which the eye is liable during secondary syphilis. Iritis being, however, the only form which we could really demonstrate, our conjectures as to syphilitic retinitis, choroiditis, etc., were always more or less vague. The subjective phenomena were, for the most part, all that we had to guide us. The not unfrequent occurrence of loss of vision in the subjects of secondary syphilis, and without external disease, however, left little room for doubt as to the fact that the deeper tissues do sometimes suffer. The ophthalmoscope has now afforded us the power of investigating these forms of disease with great accuracy. There are few diseases of the eye the recognition of which is of greater importance; very frequently they are attended by no congestion of the outer tunics of the eye, and by but little pain; but if neglected, they often lead to destruction of the organ. The influence of specific treatment upon them is most marked and decisive.

In the hope of attracting more general attention to this class of diseases, I purpose to record a group of illustrations of it which have recently been under my care at the Moorfields Hospital. They will include instances in which the retina, the choroid, and the vitreous body were either alone or together the seat of inflammation. In some cases all these structures suffer simultaneously, whilst in others the inflammatory processes are restricted to one only; as a rule, but little pain and no intolerance of light attends them, and ophthalmoscopic inspection is easily borne. In some cases the iris inflames simultaneously, and then the examination of the deeper parts becomes impracticable, as pain, dimness of the cornea, and intolerance of light are usually added.

Like iritis, these forms of inflammation appear to occur usually amongst the secondary phenomena of syphilis much more often than among the later ones. This point, however, as well as some others, I shall endeavour to establish by numerical statements at the conclusion of the report. In certain instances of amaurosis with white atrophy of the optic, a syphilitic history is given, the disease coming on long after the secondary period, whether it is really connected with the taint may be held doubtful. Of the relation between cause and effect in the cases of which I am now about to speak, there is, however, no more doubt than there is in the instance of syphilitic iritis. J. H.

REPORT ON SYPHILITIC INFLAMMATIONS OF THE RETINA, CHOROID, AND VITREOUS BODY.

Case 1.—*Syphilitic Retinitis of one Eye a few months after the Primary Disease—Recovery under Prolonged Specific Treatment.*—The following are my very imperfect notes of a well-marked case:—George F., aged 20, was admitted on March 31, complaining of impaired vision in his left eye. His left retina was found by the ophthalmoscope to be congested and hazy, looking as if thin gauze were before it. There was no iritis. He said that he had suffered from chancres a few

months before, and that rash and sore throat had followed. The rash was now gone, but healing ulcers were still visible in his tonsils. His other eye was not affected. I prescribed a pill containing half a grain of calomel and the same of opium, to be taken three times daily. In a week, being slightly salivated, the pill was limited to once a-day. Subsequently, as the progress was slow, he again took it twice a-day. With some intermissions, mild mercurial treatment was continued until the beginning of September. During the latter part of the time, however, he took the pill only every other night. When the course was relinquished he had regained almost perfect sight. I saw him again on January 2; he could then see almost equally well with either eye, but the right was still rather the better. All ophthalmoscopic evidences of disease had vanished, and the retina was now perfectly transparent.

Case 2.—*Syphilitic Choroiditis of the Left Eye with films in the Vitreous—Primary Syphilis a year before—History of a similar attack in the Right Eye three months before.*—Mrs. P., aged 24, was admitted in February, 1860, on account of impaired sight and "dreadful forcing pain" in her left eye. There was no iritis, nor any visible sclerotic congestion. With the ophthalmoscope flocculi were seen floating in the vitreous humour, and numerous patches of lymph, some white and some slightly brown, were visible on the choroid in various parts. The attack had commenced three weeks before. She stated that she had contracted sores from her husband during her previous pregnancy, and that subsequently a rash showed itself. Her confinement was in March, 1859, and she was now again pregnant (two months). Her right eye had been inflamed three months before her present admission, and, according to her account, the symptoms had been much the same as those now existing in the left; she then attended Mr. Critchett, and, although at first all but blind, regained perfect sight. I prescribed mercurials, but, unfortunately, have no note as to the progress of the case.

Case 3.—*Extensive Turbidity of the Vitreous in Both Eyes—History of Primary and of Constitutional Syphilis.*—Mrs. M., aged 36, was admitted in July, 1859. The two eyes were equally affected. She complained of dimly-seen muscæ and "clouds of smoke" before them, and was unable to tell the time by the clock or to read the largest type. The attack had, she said, commenced about four months ago rather suddenly. The left was first affected, and soon afterwards the right also. With the ophthalmoscope, the vitreous in each eye was seen to be turbid and full of white, silvery films floating in its structure. The choroids and retinæ could with difficulty be seen. Mrs. M. was the mother of nine children and was now nursing her youngest, a baby ten months old. On her shoulders was a well-marked syphilitic rash, and she stated that her husband had communicated the disease to her in November last. Excepting being reduced by nursing, she was in fair health. A mercurial course was ordered; the baby to be weaned. I have no record of the result.

Case 4.—*Syphilitic Choroiditis in Both Eyes, commencing two or three years after the Primary Disease—Advanced Atrophic Changes.*—Mrs. B., aged 27, from Scotland, came under care on May 16, 1861. She said she was blind of the right eye, and feared that the other was also failing. I found that with the right she could just distinguish large objects. She stated that her sight had begun to fail more than three years ago, and had been much as at present for a year past. She had been married seven years, but had borne no children. Excepting that she was rather pale, her aspect was that of good health. With the ophthalmoscope I found very extensive atrophic changes in the right choroid. The margins of the optic entrance could not be distinguished, and its position was only ascertained by tracing the convergence of the retinal vessels. The latter were extremely small. Irregular and ill-defined whitish-gray patches were seen in various parts, but in none was the choroidal tissue wholly absent. The humours were clear, and there were no iridal adhesions. In the left eye the same state was seen, but in a much less advanced stage. As the state of the choroids was such as to render the diagnosis of syphilis almost certain, I put a direct question, and was informed with reluctance that she had contracted the disease from her husband about six months after her marriage. A rash followed, and she was treated by mercury to salivation. Since then she had believed herself well. She had borne no children, but had had two miscarriages.

Case 5.—*Syphilitic Iritis in an Old Person—Inflammatory Opacity of the Vitreous Body in Each Eye.*—Mrs. B., aged 65, came under care in the first instance on account of acute syphilitic iritis in both eyes. This was in August, 1860. The iritis had been noticed for a week, but she said that her sight had been getting dull for about a month. She had married for a second time five months before, and her husband had given her syphilis. She had a copious and most characteristic rash at the time. Her sight had in every respect been perfect up to the date of the syphilis. Treatment by iodides and mercurials was pursued, but although the iritis was arrested and the rash disappeared, the eyes did not progress satisfactorily. On November 15, three months from the commencement of the iritis, the state of her eyes was described in the following note:—"Both pupils dilate fairly under atropine, but in both are seen tags of adhesion at several spots. In both lenses there are striæ of opacity, but the changes are not such as to prevent the examination of deeper parts. In both eyes the vitreous substance is turbid, and presents innumerable floating films. In the right the turbidity is greater and the films larger. The retina cannot be examined in either eye, owing to the turbid state of the vitreous. She is obliged to be led about, and can only just distinguish large capital letters." Unfortunately, I had no opportunity for following this case further. I could not avoid the suspicion that the peculiar course taken by the disease was partly consequent on the advanced age of the patient. It is very unusual to see acute syphilitic iritis occurring promptly after the primary disease at the age of nearly 70, and it may easily be supposed that at such a period of life, when the nutrition of the organ is impaired, inflammatory processes once established would be apt to run on to serious changes. Respecting the iritis, it may be noted that it was never attended by any large effusion of lymph. The treatment was as active as the woman's age and state permitted. Mercurials were given cautiously, but on more than one occasion she was slightly salivated.

Case 6.—*Iritis in the Right Eye—Syphilitic Psoriasis Palmaris and Sores on the Tongue—Diseased Vitreous and Choroid in the Left Eye—History of Syphilis denied.*—Frances S., a feeble woman, calling herself 53, but looking ten years older, was admitted in October, 1860. She assured us that she had had good sight until a year before. Latterly her right had failed, and she had become somewhat myopic. Both her irides were deficient in lustre, and of steel-gray aspect. The left pupil dilated widely, but the right showed numerous tags of adhesion. The iritis was evidently recent, and some sclerotic congestion was still present. She stated that the attack had begun three months ago, when both eyes became bloodshot; there was dimness of sight and great pain in the back of the head, preventing sleep for several nights. After this her hair fell off. With the ophthalmoscope, the left globe was found to be much lengthened, so that the fundus came into view without need for the lens. A very extensive ring of white was seen surrounding the optic disc. The choroidal pigment was irregularly scattered in patches. A single floating film was seen in the vitreous. In the right the optic disc was oval, and there was a long, narrow crescent on its temporal side. No other changes. The history as to syphilis was as follows:—Mrs. S. had been married twenty-eight years, and had one living child, now aged 18. She had not lost any children, nor had she had any miscarriages. Her husband she believed healthy, and she denied having ever had any primary sores. There existed, nevertheless, a most characteristic form of psoriasis palmaris in both her hands, and her tongue showed white patches and fissures which were unmistakeable. These conditions had, she said, been present only four months. *Treatment.*—When admitted, the iodide of potassium, in ten-grain doses, three times a-day, was prescribed, and a blister applied behind the right ear. The iritis soon passed off, and her vision much improved. She continued the iodide until December 3, and with great benefit in every respect. On several occasions she had left it off for a time, but always found that she relapsed when she did so.

Case 7.—*Double Retinitis two years after Primary Syphilis—Films in the Right Vitreous—Sight much impaired—Irregular Benefit from Specific Treatment.*—Henry B., aged 28, admitted November 1, 1860. His sight had been gradually failing

since Christmas, 1859. He ascribed it to night-work, the flame of the lamp blowing towards his face most of the night. He first found that he could not see so well in the dusk, but his sight got gradually worse, so that on his admission he could not see to read small print. He had slight supra-orbital pain, but not sufficient to prevent sleep at night. He could see better in strong artificial light, but in strong sun-light his sight left him until he had been in it for a little time. Three years ago he had syphilis and a "sloughing bubo." He took pills for a fortnight before the bubo appeared, but his mouth was not made sore. It is two years and a-half since he got rid of these symptoms. He remained well a year and a-half, and then hoarseness came on. On admission, there was seen the remainder of ulceration in the tonsils, and well-marked syphilitic ulceration at the right corner of the mouth. On superficial examination, the eyes appeared normal, and the pupils dilated well by atropine. He was pale, but not thin. Tongue red at tip and edges. On examination by the ophthalmoscope, it was noted that the margins of the optic entrance were very indistinct and of a pink colour, which tint extended over the whole uniformly-congested retina. There were films floating in the right vitreous. Ten grains of the iodide of potassium were ordered three times a-day, and a blister was applied behind each ear. He took the iodide to January 3. On January 3 one grain of calomel and half-a-grain of opium were given twice a-day and continued for one week. His gums were touched, and during the salivation he was decidedly better, and remained so for a week, but subsequently he relapsed. The calomel and opium was then again (February 12) given every night; it was continued until February 17, when, in addition to the pill, ten grains of the iodide of potassium were given three times a-day. On the 14th it was noted that his sight was but little improved since admission. The ulcerations at the corners of his mouth and on his lips were still present. There were some blotches about the arms, forehead, and chest. His gums were still swollen. He was pale and cachetic. With the right eye he could read large letter, but not with the left. 26th.—No better.

GUY'S HOSPITAL.

RUPTURED INTESTINE—DEATH—AUTOPSY.

(Under the care of Mr. BIRKETT.)

We mentioned last week an important case, in which a man who sustained an extensive laceration of the liver showed no symptoms of the lesion until he suddenly died on the following day. The case which we now give also illustrates the same point, and shows that, after even very severe injuries to the abdominal viscera, the immediate symptoms may be but slight.

John H., aged 49, admitted June 6. He lived twelve hours after admission. Whilst at work at the river side, a bale of wool fell on him. He was brought to the Hospital and walked to his bed, and it was not very clear that he was seriously injured. In the evening he was found collapsed, and shortly died. It was then suspected that he had ruptured some internal viscus.

Autopsy.—Slight ecchymosis over the abdomen. There was slight extravasation of blood beneath the abdominal integuments. On opening the abdomen, the coils of small intestine, covered partly by omentum, were matted together by lymph and blood. On removing the blood, which might have amounted to a pound in all, a portion of intestine, with its mesentery, was found lacerated. It lay immediately beneath the umbilicus, and was a portion of the ileum about six feet distant from the cæcum. A small quantity of fæcal matter had escaped. The laceration was remarkable, as being altogether on the mesenteric side. The tear was vertical through the mesentery, and about an inch and a-half long, lacerating the blood-vessels, whence the blood. The laceration then continued into the bowel, dividing it not quite through, but about three-quarters of its circumference, leaving a margin of membrane on the external side. From the matting together of the coils of intestine by lymph, blood, etc., the extravasation of contents had only been slight. The peritonitis was confined to the parts adjacent to the injury.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

RAPID ABSORPTION OF PUS FROM THE ANTERIOR CHAMBER OF THE EYE.

(Under the care of Mr. DIXON.)

If any of our readers still doubt as to the possibility of the absorption of pus the following case may be of interest. It illustrates an event which is not at all unfrequent in the practice of our Ophthalmic Hospitals, though the process was certainly more rapid than usual:—

Richard D., a boy, aged 6, was admitted under Mr. Dixon's care at Moorfields on Thursday last. His right eye was acutely inflamed, there being a central ulcer on the cornea and hypopyon. The quantity of pus in the anterior chamber was, perhaps, about two drops, it was quite fluid, occupied the most dependent part of the chamber, and moved on motion of the head. There had been no known injury, the inflammation having commenced spontaneously with much pain three days before. The boy appeared out of health and feeble. He had already been well purged. A blister was ordered to be put behind the ear, and a grain of quinine to be taken three times a-day. When the boy attended on the following Monday *every vestige of the pus had disappeared*, and the whole aspect of the eye was greatly improved.

The result of this case cannot but be instructive to those who advocate paracentesis of the anterior chamber in hypopyon. With regard to the general question of the absorption of pus, we may ask, why should not that occur in abscesses, in empyema, in suppuration of joints, which we see so clearly and so frequently in cases of purulent effusion into the anterior chamber of the eye?

THE GENERAL HOSPITAL, KIEL, HOLSTEIN.

DEFORMITY OF THE LEG CONSEQUENT ON BADLY-UNITED FRACTURE OF BOTH BONES, CURED BY OSTEOTOMY.

(Communicated by Dr. F. ESMARCH, Professor of Surgery and Ophthalmic Surgery at the University of Kiel, Holstein.)

Emma M., aged 3½, a healthy, strong girl, from Hensburg, in Schleswig, was taken in on March 4, 1860, for a considerable deformity of the left leg, said to have arisen without any known cause at a very early period of the child's life. The mother reported that, about six weeks after birth, she perceived two prominences on the front of the left leg. The Medical attendant comforted her with the assurance that they would soon disappear. Nevertheless, as the deformity continued to increase, and the child in attempting to walk exhibited much lameness, she applied for admission into my wards.

FIG. 1.

On admission the leg was curved, as shown in Fig. 1. On its anterior surface were two large prominences, the upper of which, three and one-eighth inches below the lower edge of the patella, arose from the tibia, which here formed posteriorly an angle of 125°; the lower prominence, three and one-eighth inches lower down, and more external, sprang from the fibula, which here made an angle of 110°. As the bones could everywhere be felt through the soft

parts, I marked their outlines with ink on the skin, as represented in Fig. 2.

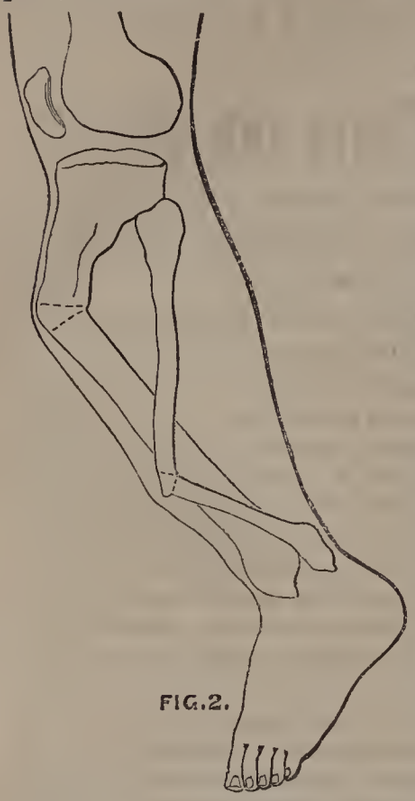

FIG. 2.

No traces of rachitis were present, or had at any period existed. There could be no doubt that an undetected fracture of both bones, since firmly consolidated, had caused the deformity; but nothing could be learned as to the time when this had taken place—*i.e.*, whether during the act of birth, whether the child had been overlayed, or allowed to fall.

Two modes of remedying this deformity suggested themselves, firstly by breaking the bones again, the child being under the influence of chloroform; or, secondly, osteotomy. The first plan seemed inapplicable to this case, as it would have been scarcely possible to break the two bones at the same time at their different places of curvature. I was encouraged to try the second by the excellent results which Dr. Maier, in Wurzburg, and Professor Langenbeck, in Berlin, had obtained by it.

On March 8 the operation was done in the following way:—The child being under the influence of chloroform, I made a half-moon shaped incision beneath the prominence on the tibia (the convexity being towards the foot), and formed a small flap, the base of which was rather above the place where I intended sawing through the bone. My intention was to procure through this incision a good covering for the sawn bone, and at the same time room for the use of the saw. After dividing the periosteum with a knife, I sawed through the tibia immediately below the prominence with a watch-spring saw, in a curvilinear direction from before backwards. The tibia was here unusually broad, owing to the formation of callus. I then made a similar flap over the prominence on the fibula, and sawed through that bone. I hoped by cutting the bones in a curvilinear direction to avoid removing wedge-shaped pieces. By lifting the lower concave end of the tibia around the upper convex end, I was able to place the bones in a straight position. But, in consequence of the resistance of the soft parts, the deformity immediately recurred, when I ceased my hold. As the muscles were perfectly relaxed by the chloroform, I conjectured that the tension could only be due to shortening of the interosseous ligament, but did not dare to cut blindly into the deep parts, on account of the proximity of the posterior tibial vessels. I preferred removing a wedge-shaped piece from the head of the tibia, after which the leg was easily made to remain in a straight position. I also removed a wedge-shaped piece (quarter of an inch) of the fibula, as the lower end overlapped the upper when the leg was straightened. In order to keep the ends of the tibia well together, I bored holes obliquely through both ends, and passed into them a silver wire, and then fixed the surfaces of the bones firmly together. Both wounds were united with fine sutures, except their inner angles, which were left open for the escape of matter. No artery had required ligature. The leg was placed on a splint, such as I use for resections of the knee-joint, and the wounds dressed with strips of oiled lint, and ice applied over the lint.

On recovering from the chloroform, the child but for a moment complained of pain, felt very well the whole day, and slept as usual. In the course of the following day a sharp reaction came on, the temperature of the body was much augmented, pulse exceeded 180, sleep disturbed, head hot; still the child did not complain of pain, but was sometimes delirious. As the left pupil appeared larger than the right, I ordered a leech to the left temple, and a dose of digitalis. The child then became quieter, fell into a deep sleep, and on the following morning (March 10), when she awoke, the fever had decreased considerably, pupils were alike; the child made no complaint. On removing the dressing the wounds appeared unchanged, except that a little healthy matter discharged from their angles. The ice was continued, but the digitalis omitted.

March 11.—The child was still better. On the 12th the temperature and pulse were normal. Her appetite was good, and she had no pain. The wounds were almost entirely healed by first intention. Several sutures were removed without causing separation of the wounds. The ice was discontinued on the 14th, but resumed the next day on account of acute feverish symptoms and more free suppuration. On March 16 the remaining sutures were removed, but the suppuration continued, and the edges of the wounds gaped, which, I believe, would not have been the case if the ice had not been temporarily omitted. On March 20 the ice was exchanged for lukewarm fomentations, the child having had frequent chills. The wounds were now filled with fine granulations, the discharge decreasing daily until the 27th, when an increased flow was observed from around the silver wires. The wires were, therefore, removed without difficulty, when the discharge decreased. Although firm bony union had not yet ensued, the bones were well in position. Cicatrization was proceeding favourably. On April 23 the leg was removed from the resection-splint, and placed in a simple hollow wooden one. May 10.—The wounds were almost entirely healed, when the child at night again became feverish and delirious. The next morning a smooth plate of bone projected, and was extracted, and a few days later a similar piece, both of which seemed to come from the sawn ends of the tibia. The wounds now closed, and strong bony union ensued. June 14.—The little patient was dismissed from the Hospital perfectly well, the leg was as represented in Fig. 3. No difference in the length of the extremities could be detected on careful measurement; the child walked without support securely, and with no lameness.

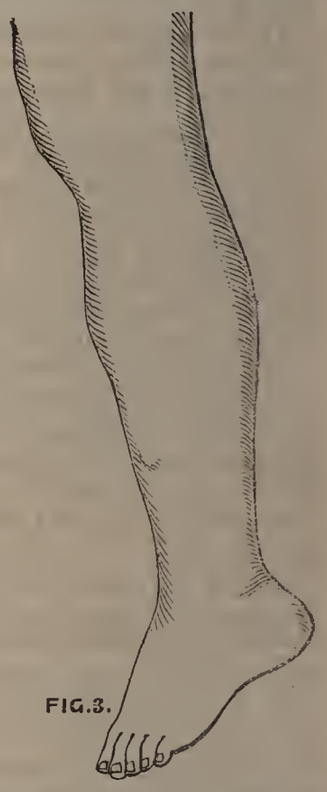

FIG. 3.

[We are indebted to Mr. L. S. Little for the translation of the above article from Dr. Esmarch's manuscript.]

LINCOLN COUNTY HOSPITAL.

MALIGNANT TUMOUR OF THE THIGH SIMULATING AN ANEURISM—LIGATURE OF THE EXTERNAL ILIAC ARTERY—DEATH—AUTOPSY.

(Under the care of Mr. HEWSON.)

Martha E., aged 22, a waiting-maid, was admitted into the County Hospital, Lincoln, on June 18, 1855. She was apparently of healthy constitution; she had been in active service from her youth, and no trace of any malignant disease existed in the family.

Three years ago she perceived a tumour of considerable size, not exactly definite in its extent, but diffused, on the front and outer part of the left thigh at about its middle. It had not increased in size since that time. She noticed a pulsation in it at the outset. She had had very excellent health since its commencement, had never been prevented from following her usual avocations, and had felt no inconvenience from the tumour excepting occasional lancinating pains, which had slightly increased lately.

June 18.—She is apparently in good health; all the ordi-

nary functions are performed with regularity; her countenance bright and healthy-looking; and nothing appears to lead to a supposition that any disease whatever exists. She can and does walk in the garden for several hours daily, and never experiences any inconvenience from her exercise. On examining her left thigh, there is found a pulsating tumour on the front and outer part of the middle, and encroaching on the upper third of the thigh, to within an inch and a-half of Poupart's ligament. It is elastic, and when the femoral artery is compressed at the groin, the size of the tumour diminishes considerably, and pulsation ceases; on removing pressure, there is a distinct feel of the refilling of the tumour. There is a distinct aneurismal bruît on listening over the tumour itself, and also in the direction of the femoral to the groin. The pain on pressure over the tumour is very slight, the bone does not seem at all affected, and there is no uneasiness on any movement of the limb.

After having been in the Hospital a few days, and seen by Mr. Hewson alone several times, a consultation of the whole staff was held. The opinion was unanimous that aneurism existed.

The treatment by compression could not be resorted to, in consequence of the proximity of the tumour to Poupart's ligament. It was therefore resolved to tie the external iliac artery.

26th.—A dose of castor-oil and a common enema was given. 1 p.m.—The external iliac artery was tied by Mr. Hewson. Nothing remarkable occurred during the operation. The limb was cold and numb for a short time after. Hot bottles were applied to the feet. 8 p.m.—Feet warm. Pulse 144. Severe pain on the outer part of the wound; no pain on pressure over the abdomen. Pulv. opii, gr. ij. statim. Vin. opii, mxx. tertiâ quaque horâ.

27th, 7 a.m.—Has had very little sleep. Peritonitis is evidently present. She has general pain over the abdomen, with anxious countenance. Continue opium. Pulse 162. Tongue dry, furred. 3 p.m.—Less pain. Pulse 160, full and sharp. 4 p.m.—There is a greenish patch on the skin just below Poupart's ligament, with brickdust-red round it. Pil. cal. gr. ij.; opii, gr.ss 3tis. hôris; hirud. xv. Mist. salina effervescens. 10 p.m.—Tendency to nausea; countenance anxious. Pulse 162, small and feeble. The leeches bled freely.

28th, 8 a.m.—Has had no sleep. The greenish tint is extending. She has hiccough; rejects her food. Brandy; beef-tea. Pulse almost imperceptible. She gradually sank, and died at 5 p.m.

At the post-mortem on the following morning, at 5 a.m., on dissecting over the tumour, and removing the muscles on the front of the thigh, a tumour was found—oval, long diameter from above downwards; it was lying on the bone and below on some upper fibres of the crureus muscle; it was grooved behind by the bone, and the profunda artery and vein went into it at its upper part, and divided almost completely in the tumour into a large number of considerable-sized vessels. On making a section, the openings of innumerable vessels were seen, and interspersed among these were cancer-cells. On a microscopic examination, there were found cancer-cells forming, with capillaries, the principal substance of the tumour.

For the notes of the above case we are indebted to Mr. Brook.

In the *Medical Gazette*, Volume xiv., p. 590, is recorded a "case of malignant tumour simulating aneurism," in which the common iliac was tied by the late Mr. Guthrie. This patient, a lady (no age given), was seen in consultation with Sir Astley Copper, Mr. Keate, and Mr. Thomas. Sir Astley Cooper and Mr. Thomas agreed with Mr. Guthrie, that the tumour (a pulsating swelling the size of an adult's head in the right buttock) was an aneurism. Mr. Keate at first had doubts, but subsequently also agreed that the tumour was an aneurism, and that ligature of the common iliac ought to be performed. This was done by Mr. Guthrie, August 24, 1833. Pulsation was immediately arrested. The ligature came away twenty-six days afterwards, and the patient was then doing remarkably well. The tumour immediately subsided and continued to get less, and at the end of a month was diminished one-half. This improvement was, however, only for a time. In the beginning of 1834 the tumour began again to enlarge, and the patient died on April 30. It was then found, as Mr. Guthrie began to suspect some time before death, that the disease was fungus hæmatodes, and had destroyed part of the ilium, and had extended into the abdomen.

Medical Times and Gazette.

SATURDAY, SEPTEMBER 14.

THE *SATURDAY REVIEW* AND COUNTRY DOCTORS.

There is abundant evidence that one of the *Saturday Reviewers* has been spending part of his vacation at a great house in the country. There, possibly, too bracing an air, or over fatigue with the gun, or, peradventure, an excess of devotion to the efforts of the *chef de cuisine*, produced some kind of bilious attack. The host saw what was the matter, sent for his own Doctor, and suggested the treatment. The Doctor obeyed but too well. He gave a thumping dose of calomel, which relieved the liver at the expense of the bowels, and sent the philosopher home a sadder and a thinner man.

Not unnaturally, the critic does his best to take his revenge. Nature hath happily assigned to every creature its proper weapon of attack and defence: he sets to work, therefore, to "execrate the country Doctors" in last Saturday's number, and to repay with his goose-quill the outrage which has, as he conceives, been inflicted by the purgative.

"There is no doubt that they are at once one of the most puzzling phenomena of a progressive age, and one of the greatest dangers to which the mass of men are exposed. Few persons in the educated classes who are at all advanced in life but can name some former friend or relative whose loss they ascribe to their having unluckily fallen ill at a distance from London advice. It is an evil from which there is no escape. If you are abroad, the distance is generally too great to give you a chance of eluding the hands of the local Sangrado. If you are staying in a country house, there is always some favourite apothecary whom the family have patronized, and whose abilities it is therefore part of their state and dignity to uphold. As a man and a guest, you cannot do less than send for him. You might almost as well depreciate your host's wine, or cast a doubt on the healthiness of the locality in which he lives, as decline to be murdered by his Doctor. Generally, you have not more than a moment to decide; for his officious hospitality has brought the messenger of death to your door, and your consent is only formally asked before he is let in. Once inside the threshold, he will secure his footing for himself. If you are recalcitrant to the rules of his art, and decline to take your chance of kill or cure in the proper form, his insulted skill has, at least, resources enough to tame your stubborn will. It is significant that the equivocal name 'leech' has been conferred in common upon the human and the reptilian Practitioner; and if you were abroad, you would realize its meaning to the letter. The fatal Continental lancet, which has robbed Italy of her deliverer and Europe of its brightest ornament, has sent many an English traveller home to an early grave or life-long disease. In England you have no such fate to fear. Even the country Doctor has, in most places, got beyond the lancet. If, in any desolate part of the country, you should fall in the hands of some very antiquated specimen who should dare to propose it to you, it is generally a safe rule to summon up all your remaining powers for the purpose of pitching him out of window. But all the ends of blood-letting can be attained without breaking the skin. The system is alive in England, though this peculiar manifestation of it is extinct. The spirit which presided at Count Cavour's bedside is the informing spirit of the average English country Doctor. He is proud of the power of his art, and is great at active measures. When he administers a few thumping doses of calomel, and brings you to death's door, he experiences a feeling of pardonable exultation at being the

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possessor and recognised master of so potent a spell. He likes showing the astonished spectators how rapidly he can kill even the most violent disease; and if he should happen to kill you too in the operation, he regrets, of course, the untoward incident, but he does not regard it as any impeachment to the completeness of his triumph. Or, perhaps, he may have travelled a step beyond this stage. An unusual number of deaths occurring rather too close together, or a stray number of a Medical treatise of recent date, may have diminished his faith in the omnipotence of calomel. In such a case, he probably does nothing; for the faith of his youth is gone, and there is nothing to fill its place. But this is probably the best extreme of the two. We have Sir Benjamin Brodie's authority for believing that, if a Practitioner were to administer no other medicine than distilled water, the large majority of his patients would probably recover anyhow. As sincere admirers of natural death, we decidedly should be inclined, when we had the choice, to set aside the country Doctor who kills you in favour of the country Doctor who lets you die.

"Considering that all mankind cannot at all seasons live in London, the natural history of the Country Doctor is a subject for melancholy reflection. But there is nothing to be wondered at in it. It is another illustration of the great truths of Free-trade—of the absolute necessity of competition as an intellectual and moral tonic. The Country Doctor is apt to be unskilful, for the same reason that the country parson is apt to be dull. They have all the sickliness of protected interests. They enjoy an almost absolute monopoly, and have little to fear from failure. Medical etiquette is a powerful tyranny, as every one knows who has ever reflected on the best mode of dismissing a bad Doctor and securing a good one in his stead. The districts of the country Practitioner are minutely mapped out and rigidly preserved. Within its limits he claims the sole right to purge, blister, and destroy. Any poacher on the manor would fare as badly among his Medical brethren as a clergyman who was given to field-preaching in his neighbour's parish would fare at a clerical meeting. Indeed, the temptations to intrusion are seldom very great. The Doctor in possession is entrenched behind a strong 'connexion,' which yields as little to the inroads of time as other rural habits and traditions. His virtues are almost an article of faith with his legitimate patients. Brandishing your Doctor's merits in your visitor's face, and submitting while the same is done to you, is a favourite resource for beguiling the ceremony of a country morning call. A true rustic freeholder, not corrupted by town ideas, would as soon think of disloyalty to his Doctor as of infidelity to his family pew. Of course these securities do not absolutely exclude poachers; and where new comers are increasing in a neighbourhood, they make their appearance to share the spoil. But it reduces infinitely the fear and the spur of competition. There is none of that keen rivalry which in London does not suffer the doctor to flag for a moment in his efforts to keep foremost in the race of science. The Country Doctor must no doubt consult the humours of his clients; but they are easily ascertained, and not hard to gratify. When they are in health, or only moderately invalid, the remedy they most affect is gossip, administered in copious doses, and exhibited in a pungent, and sometimes even in an acrid form. When they are more seriously ill, the one thing they insist upon is good drastic treatment. Gentle measures they are inclined to resent as an imputation on their bodily vigour. They have a good deal of the Abana and Pharpar philosophy in their composition, and will not believe they have been effectually cured until they have been very nearly disembowelled. Then they have generally attachments and antipathies among the drugs—looking upon some medicine with a sort of pride of ownership, because it once cured them in some totally different disease, and looking upon some other as a personal enemy, because it at once disagreed with them when, in a condition of perfect health, they prescribed it to themselves. All these caprices the Doctor must study with care. Even if it be not necessary to keep competition at bay, it helps to multiply the occasions in which a patient thinks his presence indispensable. In fact, his duties would not form a bad introduction to a diplomatic career. If every unpaid *attaché* were forced to serve his preliminary years in the capacity of a Country Doctor, they would be unequalled in dealing with those too numerous Courts where elderly women bear sway. But of Medical Science, he never has occasion to add to the slender stock which as a lad he brought with him into the country.

"Of course, the censure of any class must be subject to large qualifications. There are many country Doctors who are recognised as equals by the best Practitioners in London. There will always be a few choice spirits who do not rest in isolation, who do not flag for want of competition, who can keep pace with the altering requirements of their age in spite of the disadvantages of a narrow sphere of observation. We will entreat each of our readers to assume that their own particular pet is meant to be included in the exception. Still it is a pity, in these days of extended Medical organization, that something is not done to neutralize the deteriorating influences which drag the average country Doctor down so low. The folly of patients may be irremediable, but the isolation and the want of a varied experience might be cured. Something might be done by the extension of the Hospital system which has worked such wonders for the Medical Profession in our great towns. Is it absolutely necessary that every wretched rustic who tumbles backwards off a ladder, or leaves one of his limbs behind in a saw-mill or a chaff-cutter, should inaugurate the process of cure by a dozen miles' jolt in a neighbour's cart to the County Infirmary? Might it not be possible to establish Hospitals on a small scale in the smaller market towns, and so to diffuse more widely the advantages which they confer both on patient and Doctor? Such a movement could only proceed from those whose constant residence in the country would made them the chief gainers by it If it could be set on foot, it would go far to diminish one of the chief drawbacks on rural seclusion which, in moments of sudden anxiety, or under the pressure of sorrow that might have been averted, has been often and bitterly felt."

It is not worth while to argue with a man who is suffering from a stomach-ache, so we will leave unnoticed that which he alleges in his wrath as to the ignorance and unprogressiveness of the country Doctor. He evidently is unfair when he compares the average of country Doctors with the *élite* of the Faculty in town. In town the worst are to be found as well as the best. In town are to be found some "mere Apothecaries;" the men who abuse the facilities of consultation, and make this a refuge of ignorance; who possess little of self-reliance and of the power of dealing with extreme cases, and especially of good Surgery. In the country are to be found the best specimens of men; large-hearted, broad-shouldered, keen-witted, ready at a pinch for any emergency in any branch of our enormously-ramified profession, be it craniotomy, catheterism, ligature of an artery, or the detection of arsenic at a *post mortem*. That they should have all the refinement of men who devote a whole life to a single branch of what the country Doctors are compelled to grasp as a whole, would be impossible. Ask a town specialist to cut down on an artery, or reduce a hernia, or turn a child, and he may say, "I do not practise in that line; send to my neighbour." Not so the countryman; he must be armed at all points, and ready to treat any case. And wonderfully well he does his work. When we consider the hours he must spend in the saddle or carriage, the intense bodily fatigue, the necessity of attending to dispensing, to the keeping accounts and poor-law returns, and the multiplicity of petty details which must be looked to if a man is to live on a profession in which the profits on each transactiou are very small, the only wonder is how our country brethren find time to keep up their literary and scientific pursuits; and how they can snatch an hour for the microscope or the botanical excursion, or for the transcription of the valuable cases and essays which they contribute to the Journals and *Transactions;* and we see how thoroughly well they fill their place. If it be assumed that London Practitioners have advantages, then it must be matter of gratulation that the number of country Practitioners who avail themselves of London privileges is becoming greater year by year. We, who think it virtuous to go out after dinner to a Medical Society, are put to shame by the well-known faces which greet us at the Medico-Chirurgical or the Obstetrical, from

Eltham, Hatfield, Alford, Birmingham. Manchester, or Bristol. Operating-days see a crowd of wholesome rosy faces in the privileged circle of the Hospital theatres; and from the remotest districts men come, like the Athenians of old, to hear and to tell τι καινότερον.

If, in out-of-the-way districts, Practitioners acquire the habits of the society which surrounds them, and fall into a line of practice to match, it cannot be helped. We confess that some may be a little heavy-handed in their purgative doses, and that they scarcely recognise the disturbances of the nervous system which torment literary townsmen. On the other hand, it is not every town Physician who could, off-hand, give entire satisfaction to a club of Odd Fellows, or to a set of farmers and millers and their deep-bosomed wives.

But it is prudent to take a hint, come whence it may, and there are one or two points which our astute critic has hit upon that may as well be frankly admitted. As for the system of "protection" which he speaks of, that is at an end in the best London society, and is rapidly vanishing elsewhere. To claim a man as "my patient" in such a sense that it implies that he shall consult nobody else, is becoming a thing of the past. Family connexion and other influences may bring a man patients, but the Londoner is perfectly aware that if he is to keep them he must either do them good or they must think that he is doing it. In the country to dismiss a Medical attendant and call in another would set all the gossips by their ears for a month. In London there is no house we enter in which, without the slightest breach of courtesy or good feeling, we must not be prepared to hear, "Now, my dear Doctor, we are not getting on. Don't you think we may as well consult Dr. So-and-So?" The notion of vested property in patients is gone in London; and it will not last long in the country. The sooner this is clearly seen, the better.

As for Hospitals in market-towns, they would give the stimulus of publicity to treatment, and the benefit of mutual conference. And, as we have often observed, the materials exist in the union workhouses and their sick-wards, which only require a more liberal organization, and a revision of the regulations which at present render the Civil Medical Service mean and repulsive. If the *Saturday Review* would raise the Country Doctor, let him reform the Union management. As we had occasion to remark, in reference to the case of Gattie *v.* Halford, the bane of our Profession, and especially in country districts, is the desire that men have of keeping patients to themselves, and the jealousy which hinders them from giving their patients the benefit of another opinion, and themselves the benefit (often, as the Courts of Law demonstrate, the solid pecuniary benefit) of a division of responsibility. In London, a more liberal, as well as a more prudent, spirit prevails. In a difficult case, a man does not haggle with himself and refuse consultation in fear of losing the entire credit of the case, but he willingly seeks the opinion of a professional friend, as much for the patient's benefit as for his own. In some parts of the country, consultations are almost unknown; if proposed, they are almost resented as an insult, or as a vote of want of confidence, and men will send fifty miles for a Physician rather than give their neighbours the credit of being "called in." The benefits of interchange and collision of opinion are thus cut off, and the evils of a limited sphere of experience are aggravated by churlish isolation. Country Doctors will gain more confidence from the world when they put more faith in each other; and greater frequency of professional consultation will give them an astuteness and flexibility which will enable them to deal with the most irritable of London critics should he again trust himself in their hands.

THE WEEK.

In England, at present, any opposition to vaccination proceeds from a very few eccentric politicians of the Tom Duncombe and Coningham stamp, and from Morrison, the Hygeist, and the "British College of Health, Euston-road, London," who "contend that small-pox should be allowed to have its free course, and when properly treated is not a dangerous disease, but an effort of Nature to rid the system of impurities; but when checked by vaccination falls on the lungs and other parts of the body, producing in after life fearful consequences." Unluckily, a large per-centage of persons who take small-pox have no "after life;" but a trifle of this kind would not disconcert the repose of the "Great Hygeist." In Ireland, the old objections are still adhered to, and were brought forward in great force last week, at a meeting of the Belfast Dispensary Committee, by a Mr. Tierney. This *respectable* man not only denounced the Surgeons for using "impure matter," but accused them of swindling, and of representing the number of cases of successful vaccination as greater than it really was. He desired to give up some vaccination stations, which were maintained at a rent of £25 per annum; whereas it was shown that the number of vaccinations in Belfast was nearly trebled since they were established two years ago. When we add that Mr. Tierney is reported to have called another member of the Committee a "minion" and a "liar," and to have received a bloody nose in return, we show what nice hands there are at work at the regulation of vaccination at Belfast, if the report should be true.

The bark *Anna Maria* from Havannah, as we learn from the *Globe*, dropped anchor three weeks ago at St. Nazaire, the out-port of Nantes, with a cargo of sugar. Two men of the crew had died of the black vomit on board, but as ten days had elapsed, the authorities gave *pratique*. The sugar vessel was lashed alongside of a steamer and a coast-guard ship. Next day the second mate was taken with *vomito*, and the local Physicians saw with alarm the fever spots. The cargo had been put ashore; and in the hold of the vessel, whence rose a horrid effluvium, 2000 dead rats were found, "whether the rats produced the plague, or the plague had killed the rats, being a moot-point." All the labourers who had unloaded the cargo, and most of the three crews, were at once down with fever. The ships were at once scuttled, and the sick carried out to sea in a vessel which served as a floating Hospital. Eighteen persons are said to have died.

The want of a rational municipal organisation in London is nowhere better shown than in the neglect of the thoroughfares. Not only is it a matter of great calculation and difficulty to get from one end of London to the other, but the mean, narrow, dark, unsightly streets themselves, in contrast to the broad, airy, tree-bordered *boulevard*, which would bring light and air into the heart of the smoky city, are monuments of the short-sighted covetousness of house proprietors, and of the absence of efficient control. Long, broad avenues of trees are infinitely preferable to dull-looking "squares," where the air stagnates, and where the poor children of the town can only learn to repine at the selfishness of the land proprietors who have studiously cut them off from the participation in the cheap enjoyment that children get from fresh air and space to play in. There our artizans might sit and enjoy our glorious summer evenings, instead of sulking in pot-houses away from their families. But not only are *boulevards* not made where fair opportunity offers,—as in the construction of the New Victoria-street,—but where they exist they are studiously and remorselessly

destroyed. Witness the New-road, where shop-fronts now usurp the place of gardens, and the Brompton-road, where the same process is going on. The French, who, after exterminating their small birds, now complain of the ravages of insects, are now beginning to find that hail-storms and drought are the consequences of the denudation of the land by the extirpation of timber. M. Jacques Valeures (quoted in the *Morning Star*) says :—

"Trees, by attracting and absorbing electricity, prevent the formation of hail, moderate the action of the winds, and temper the heat of summer; they also attract clouds, and facilitate the descent of rain. By means of their leaves they present a surface which may be said to be ten times more extensive than the soil on which they stand. When rain falls, the leaves receive and retain it in such a manner as to prevent rapid evaporation. But if they are cleared away, the water which falls on the light soil of the hills is re-absorbed immediately by the atmosphere. Thus wooded hills may be regarded as so many reservoirs that distill slowly their waters into the valleys beneath. Grasses, heaths, etc., in a lesser degree, fulfil the same *rôle*, and are assigned a similar function. A mountain covered by them absorbs the rain, and prevents them being quickly re-absorbed by the atmosphere, or of rushing in destructive torrents down into the lower lands. Rains thus retained penetrate slowly through the earth, and issue from the hills in the form of springs, which, by this simple auxiliary, can hardly ever become quite dried up."

Hail, drought, flood, insect-visitations, epidemics amongst man and beast, and interruption to industry, are traced to the absence of trees; and benefits of the material class might be hoped for from the cultivation of trees in towns, to say nothing of their rural advantages.

A man named Cassmach died in the Newcastle Infirmary on Tuesday week, whilst under the influence of chloroform. He was very weak, and laboured under scrofulous disease of the left knee, which was condemned to amputation. Before the operation he exhibited great trepidation and alarm, and took brandy in consequence. A small quantity of chloroform was then administered, and the patient seemed rapidly to come under its influence, when all of a sudden there was relaxation of the sphincters, quivering of the lips, and death. The breathing continued for a little space after the heart ceased to beat. On a post mortem the right cavities of the heart were found filled with fluid blood. The jury ascribed the death to the united effects of fear, debility, and chloroform.—On Thursday a young man died from the effects of chloroform in the Cumberland Infirmary at Carlisle. The state of unconsciousness was soon produced, when the patient ceased to breathe, and both galvanism and artificial respiration failed in restoring vitality.

Dr. Challice, with a laudable *amour propre*, has published a letter in the *Times*, on the sanitary and social improvements in the parish of Bermondsey, and still more on the prolific nature of its population, which he does not hesitate to accept as a test of prosperity and sound morality. Referring to the year 1859, he says :—

"The year 1859 is remarkable, inasmuch as the births were in excess by 34,400, and the deaths in defect 8875 of the average. The births registered were 689,881, the deaths 440,781, giving an increase to the population of England and Wales of 249,100. There is far greater difference, as regards births, between the fruitful and barren districts than there is of deaths in the most unhealthy as compared with the healthiest places.

"The entire increase of births, to deaths, was about 55 per cent.; and there are 20 districts in which the increase was 100 per cent. and upwards; while there were some districts in which the increase was less than 5 per cent.

"I will, then, take as a standard 100 per cent. increase of births to deaths, believing it to be a good, sound, honest one in a healthy moral English community.

"The 20 places where this point was reached in 1859 will, I trust, find their names in your columns. They are :—

"Farnham, Surrey; Fakeham, Sussex; Alresford, Droxford, and Catherington, Hants; Ongar and Epping, Essex; Leighton Buzzard, Bedford; Caxton and Linton, (a) Cambridge; Hoxne, Suffolk; St. Faith's, Norfolk; Liskeard and St. Columb, (a) Cornwall; Ormskirk, Lancashire; Pickering, Yorkshire; Easington and Hartlepool, Durham; Rothbury, Northumberland; Rhayader, Radnorshire.

"No district of the metropolis reached the standard, but Bermondsey, where the births were 2361, and the deaths 1140—a surplus of 1190 in this manufacturing district to the national strength. I record with satisfaction this fact. I also refer with some pride to the sanitary progress and the social improvements of Bermondsey, which, I fully believe, will stand the test of comparison with any city, town, or district within the realm.

"It will be found that in most of the ecclesiastical cities there is an absence of productiveness, and in some instances there is a barrenness.

"For example, Canterbury registered but 478 births to 354 deaths, and in 1858 the births fell short of the deaths by 15. Chichester and Exeter are scarcely less dormant. So in various degrees are the others. Peterborough alone is prominent as approaching the healthy standard (1208 births to 660 deaths).

"Liverpool is bad, and the returns are depressing—8968 births to 8146 deaths in 1859; while in 1858, melancholy to relate, the deaths outnumbered the births by 735.

"There are two towns in Middlesex—Staines and Barnet—nearly equal in population and acreage, where the widest difference prevails as regards the preponderance of births to deaths—suggestive, to my mind, of very grave reflections.

"Barnet had in 1859 a population of 14,619, in a district of 25,689 acres; in that year the deaths were 431 and the births 449. In 1858 the births were 481 to 429 deaths—in the two years an increase of 70 to its population.

"Staines had in 1859 a population of 13,973, in an area of 24,861 acres. In 1858 the births were 501 to 296 deaths, and in 1859 484 to 285 deaths—a surplus of 404 in the two years.

"To the world a diminished birth-rate appears of little importance, yet it is a question pregnant with the highest interest to the future prosperity and strength of the country."

The worthy Doctor does not tell us what proportion of the Bermondsey population dies in Workhouses or Hospitals out of the district; nor does he seem to be aware that a population containing large numbers of persons past middle life,—virtuous, well-fed, well-to-do person of either sex, whose lives are being prolonged from 45 to near 100 through the influence of the sanitary operations of which Dr. Challice is so energetic a director—the very persons whose number is the best test of the stable character of a community—cannot reasonably be so prolific as one consisting of struggling artisans. But there can be no doubt that a high death rate is a proof of something rotten. The rate of births to population is scarcely a true test.

A case, which promises to equal the most celebrated instances of poisoning, is undergoing investigation at Coventry. A man, named Beamish, is charged, under the verdict of the Coroner's Jury, with having attempted to poison his whole family, and with having caused the death of his wife and one child :—

The prisoner carried on the business of a ribbon weaver in a domestic factory, and on the morning of August 14 the whole of the family, with the exception of the prisoner himself, were at breakfast, there being two other children in addition to the deceased. The prisoner took his breakfast with him to the factory, where he had some work. Before the meal was finished, the whole of the persons partaking of it were seized with vomiting, and the mother remarked that it was singular they should all be taken ill together. The child, Emily Beamish, fell in convulsions on the following day, and died at night in the arms of the nurse. Mrs.

(a) The same excess of births as to deaths in 1858.

Beamish, however, lingered. On the Saturday she was so much better that recovery appeared possible; but she experienced a relapse, and on Tuesday, the 20th, she died. Dr. Goate had been called in by the prisoner to see 'a woman and child with the bowel complaint,' but no suspicions were raised in his mind as to the cause of the sickness, and he gave a certificate of death from diarrhœa. A post mortem examination of the bodies revealed excoriations of the lining membranes of the mouth, and an inflamed state of the stomach, as well as other symptoms of acrid poisoning. The contents of the stomach, as well as the viscera, were forwarded in a jar to Dr. Wrightson, at Birmingham. He found arsenic in a small quantity in the stomach, and evidence of the poison in the liver, the blood of the heart, and the transverse colon. Inquiries were made which showed that the prisoner had made repeated endeavours to purchase arsenic immediately prior to the sickness of the deceased. He called upon Mr. Jenkins, chemist, and asked for three pennyworth of arsenic to poison rats, with which he said he was very much annoyed, but being informed that it could not be sold without a witness as to what it was required for, he went away for one. He subsequently returned with a person who stated that the arsenic was required to poison rats, and an ounce and a half was given to him. When taken into custody he stated, that he had used the arsenic for the purpose of destroying the rats which infested the peas and beans in his garden, where he said there was a quantity scattered, but none was found, and the empty arsenic paper, labelled "poison," was on his person.

A letter found in a very suspicious way by the prisoner, was examined by Mr. Nethercliff, of the British Museum, whose evidence created great sensation, as it made Beamish guilty of forgery, and the inference was that he forged the note to divert suspicion from himself. Circumstantial evidence against the prisoner having thus been found, a motive was assigned for committing the dreadful crime with which he stood charged.

There was abundant evidence to prove that Beamish had many months prior to the poisoning been on terms of improper intimacy with Emma Statham, who worked in the ribbon trade for him. He had also been heard to say he had sworn to have her. It was therefore suggested that he desired to put his wife out of the way in order to have more complete opportunities for intercourse with this girl.

The Coroner expressed his great regret that he had to censure one of the witnesses who had given his evidence in a very straightforward manner, but he felt constrained to say that Dr. Goate had acted very wrongly in giving a certificate of "death from diarrhœa." He understood that it was a common practice for the Medical men of Coventry to give certificates of death, when they knew nothing whatever of the cause; and in this case if the Doctor had had the moral courage to perform his duty it was very probable that an inquiry would have taken place, and have saved the mother's life. He believed that Dr. Goate was extremely sorry for the inadvertence.

It would be wrong to express an opinion with the imperfect evidence before us, yet if the newspaper reports be true, that the deceased woman complained of burning in the throat and excessive thirst, and that four persons were suddenly seized with symptoms of irritant poisoning after breakfasting together, and with a relapse after dining together, it seems singular that the suspicion of poison should not have been excited, and that a certificate of natural death was so readily given. We have on a former occasion spoken of the loose manner in which death certificates are often given; and can only repeat that no man ought to certify to anything of which he has not personal knowledge.

A shocking accident—if the term accident can be applied to a regular development of effect from cause, and to the result of actions done knowingly and deliberately—has occurred in a tunnel on the Grand Junction Canal at Aga Town. Steam-engines are now used to propel the boats, but as the tunnels are long, and no larger than sewers, the boatmen are half-stifled by the volumes of carbon that are emitted from the low funnel, coal being burnt instead of coke. On Friday night two steamboats entered the tunnel, and before they again emerged from it the people in them were rendered insensible by the fumes from the engines, two of the men being quite dead, and one of them fearfully burnt by falling, while insensible, on the engine. The tunnel is a mile or more in length, and has but one shaft in it; that one shaft, we are informed, being covered over.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON PUS-CELLS IN THE AIR AND THE AËROSCOPE.

By Dr. EISELT.

During an epidemic of purulent ophthalmia, which occurred at the Foundling Hospital, near Prague, Dr. Eiselt had the opportunity of proving in his own person that infection may take place in other ways than by contact. As the attending Physician, he took every precaution to protect his own eyes from any contact with the matter proceeding from the children, which it was easy for him to do, inasmuch as the syringing and cleansing of their eyes was performed by the sisters of the establishment. Still, being engaged in the Hospital for several hours daily, he perceived smarting and heaviness of the eyes, followed afterwards by reddening of the conjunctiva, with an œdematous state of the portion lining the eyelids, and a considerable secretion therefrom. The same symptoms were observed in all the persons who had care of the children. Some of the nurses became seriously affected from getting matter into the eyes, and others they knew not how. The inconvenience, as regards the Author, was checked by the use of weak stimulant collyria.

He asks, How comes it that acute purulent ophthalmia may thus be excited without any contact, in the common sense of the word? and refers in explanation to Pouchet's recent experiments with the aëroscope as described in the *Comptes-Rendus* for 1860. Professor Purkinje constructed a similar instrument for his use. Its principle consists in forcing a determinate quantity of the air to be examined over a glass-plate smeared with glycerine, which detains the particles of dust and microscopic structures for examination. By means of this instrument (for details of the structure of which we must refer to the paper) the air was examined which existed in a ward containing thirty-three children suffering from acute purulent ophthalmia, accompanied by abundant secretion. Pus corpuscles were at once detected in the portion of air examined; and this fact the Author considers supplies the rational explanation of the propagation of the disease without apparent contact with the secretion from the eyes.—*Wochenblatt*, No. 13.

[In No. 19 of the *Wochenblatt der Zeitschrift der Gesellschaft der Aerzte zu Wien*, Dr. Schneider gives an account of a new apparatus for analysis of the air, in which he employs cotton-wool in place of glycerine.]

ON AN EPIDEMIC OF MEASLES AT KIEL IN 1860.

By Professor BARTELS.

The measles had since 1853 only shown itself in Kiel by isolated cases, when in March, 1860, an epidemic occurred, which lasted until the end of June. During this period there came under treatment at the Polyklinik (*i.e.* Dispensary) of the town 573 cases, being about a thirtieth of the whole population. Of these 31 were under a year old; 274 between 1 and 5 years old; 226 between 5 and 10; 32 between 10 and 15; and 10 above 15. There occurred 39 deaths,—*i.e.*, 7 per cent.—7 of the fatal cases occurring prior to completion of the first year, 20 between 1 and 5 years, 11 between 5 and 10, and 1 above ten years of age. In spite of this high degree of mortality, the epidemic did not assume the characters usually designated as malignant, its fatality being rather attributable

to the unfavourable conditions of existence in which so many of the Dispensary patients were placed. The complications and mortality of the disease were far less in private practice, the author then losing only two from among 50 patients. According to his observation the contagion of rubeola is much more active than that of scarlatina, spreading also more rapidly and to a greater distance, but continuing to operate for a much shorter period. The contagion in rubeola seems to act with most intensity during the preliminary febrile stage and at the first outbreak of the eruption. In 4 of the 39 cases which proved fatal, death resulted from convulsions occurring either during or prior to the outbreak of the eruption. The other deaths were due to complications set up which proved fatal weeks or even months after the commencement of the disease. In several of the cases the catarrh was intense, the paroxysms of coughing equalling those of pertussis in violence. In almost all the cases there was great emaciation and delay in convalescence. Diarrhœa in a few cases appeared at the commencement of the eruption but in many it did so only when this had faded, and then proved very obstinate : all the numerous children, however, who suffered from the diarrhœa recovering. A peculiar changed condition of the lung was by far the most frequent cause of death. This occurred in one or both lungs in 68 cases, *i. e.* 12 per cent. of all those treated at the Polyklinik. Of these cases 6 were less than 1 year old, 36 between 1 and 5 years old, 24 between 5 and 10, and 2 above 10 years. Of these 68 patients, affected with lung-complication 30 died, *i. e.* 80 per cent. of the entire mortality. All the 6 children less than a year old died, while of the other fatal cases, 14 were from 1 to 5 years, 9 from 5 to 10 years, and 1 was an adult. In 16 only of the 30 cases could an autopsy be procured. In all these, both sides of the chest were affected. In all there was intense bronchial catarrh extending into the minute ramifications, but the secretion was not of a croupal character. Important changes were observed in the lungs themselves, these, at first, as regarded the portions affected, putting on a remarkably symmetrical appearance. Numerous pale-blue alveoli, of irregular form and varying size, were at the beginning developed beneath the edges of the lower lobes, and at the posterior surface of the lungs. When cut into, they were found to contain little blood and no air, being, in fact, portions of collapsed lung, capable of artificial inflation from the bronchi. This collapsed condition, as the disease continued, surrounded the whole of the periphery with a seam three or four lines in breadth, a broad strip also, empty of air, and firm in texture, but capable of inflation, coursing along the back of each lung from apex to base, in a very symmetrical manner. After a longer period, the collapsed condition prevailed also in parts of the anterior portion of the organ. With this extension, the parts originally implicated became more or less the seat of purulent infiltration,—one of the peculiarities of the affection being the partial distribution of centres of such infiltration, in different stages of progress, amidst tissue still containing air or capable of inflation. In other fatal cases, in place of purulent infiltration, the posterior and lower lobes were found converted into a firm, resisting, pale tissue, incapable of inflation, and containing a greatly increased quantity of interstitial tissue, the bronchi being impacted with a caseous secretion. The portions of the lungs still accessible to air, usually exhibited a high degree of emphysema. In the instances of recovery from this catarrhal-pneumonia, this was always very tedious, and in many cases attended with relapse,—the disease never pursuing the typical course of simple pneumonia. The physical diagnosis of the early stages of this complication is often attended with great difficulty. In treating it, before all things an improved ventilation was sought to be obtained. The cases were at first treated by leeching and emetics, employed moderately; but any temporary benefit was followed by aggravation, and the children died. It was now determined to pursue a practice formerly put into force with good effect by Weber, viz., the application of cold water upon cloths or towels. This excited inspiratory efforts, which were beneficial, and warm towels moistened in water followed. The application was continued for hours or days, until the abatement of the symptoms had been completely secured. Even in cases seemingly hopeless the improvement was remarkable, and the mortality at once became lessened.—*Virchow's Archiv.*, vol. xxi., pp. 65 and 129.

EXCERPTA MINORA.

Administering Medicinal Substances to Young Children.—M. Hervieux, after adverting to the great difficulty which usually prevails in getting young children to take medicines, states that they may be forced to do this with great ease. The child is to be laid upon the knees of an assistant and the head thrown slightly backward, so that it cannot be raised without a considerable effort. In this position the child is very easily held, and it is remarkable to observe how this mere change of position quiets his resistance, as if he had a consciousness of his powerlessness in this attitude. If he attempts to raise himself, a finger placed on the forehead suffices to counteract all efforts he is capable of. If the nose be now pinched, the mouth is widely opened, and the spoon is easily introduced, and its contents carried rapidly along the tongue, when an effort at deglutition is made, and all is over.—*Bullet. de Thérap.* vol. lx. p. 248.

Applications in Ecchymosis of the Eyelids and Conjunctiva and Ciliary Blepharitis.—M. Déval, in ecchymosis of the eyelids, causes this solution to be applied several times daily :—Water, 125, chlorhydrate of ammonia, 2, and tincture of arnica, 4 parts. In subconjunctival ecchymosis he directs a mixture composed of tincture of arnica 2 parts, chlorhydrate of ammonia ½ to 1 part, water, 60 parts, to be applied externally to the eye and dropped into it. In ciliary blepharitis the crust must first be removed by small cataplasms, or tepid decoction of mallow, and then the following ointment should be freely rubbed, for from three to five minutes every evening, into the free edge of the eyelid : Red oxide of mercury, acetate of lead, of each 6 grains, camphor, 3 grains, fresh butter, 1½ drachms.—*Ibid.* vol. lx. p. 268.

Treatment of Hæmorrhoids.—M. Herpin strongly recommends the following ointment for non-bleeding hæmorrhoids, as facilitating the reduction, retention, and resolution of the piles. It is composed of from 1 to 3 parts of tannin to 15 of cold cream. When the stools are difficult and the hæmorrhoids much developed or multiplied, only one part of the tannin should be used, and if much irritation is produced, a still smaller proportion. After smearing the tumours with this ointment they should be immediately returned. Very shortly afterwards we may observe a constriction of the anus and a dryness of the mucous membrane impeding the easy re-issue of the piles. The patient must rest, sitting or lying down, for a short time after the reduction. A necessary condition of the cure is to return the tumours with the aid of the ointment *immediately* after their prolapse; and this means must be continued, notwithstanding the diminution in the size of the piles, until they return of themselves after evacuations and do not come down in the intervals. The constipation which favours their continuance must be treated by all means which relieve dyspepsia, and by the use of fruits. Of habitual purgatives Dr. Herpin has no great opinion; but of this class of medicines he gives the decided preference to the following :—Washed flowers of sulphur, calcined magnesia, and sugar of milk, equal parts. A teaspoonful, more or less heaped up, is to be taken daily (so as to get one or two stools), or every other day, for a week.—*Ibid.* vol. lx. p. 395.

Fatty Bodies for Collyria.—M. Decondé, a Belgian Military Surgeon, states, as the result of his experience, that in chronic ophthalmia, opacities of the cornea, and other cases in which topical applications to the eye are indicated, the substances employed are far more efficiently applied in the form of ointments than as collyria. Linseed oil or cod-liver oil should be added to the lard to insure its greater diffusibility, and for the same purpose, after putting on the ointment, we should rapidly close the eyelids and make some friction over the globe of the eye. The application should be made in the morning, and the patient encouraged to take abundant exercise in the open air. M. Decondé especially prefers the iodide of potassium, gr. vj. mixed up with equal parts (ʒj.) of lard and cod-liver oil, a piece the size of a pea to be applied night and morning. Or drops may be used, composed of nine parts of cod-liver oil to one of opium wine, or of some iodide of potassium dissolved in cod-liver oil. Of these, six or seven should be dropped in while the patient is lying down, and retained in the eye for several minutes.—*Ibid.* vol. lx. p. 162.

Extraordinary Case of Injury to the Head. — M. Bonnessous

relates the case of a man between 30 and 40 years of age, who 2 years and 8 months before he saw him had been attacked and wounded in several places by an assassin, one of these wounds being over the left parietal bone. During the period which had elapsed he had been under various persons' treatment, but the injury to the parietal, had not been particularly examined. He suffered much in his head and had become almost idiotic. On examining the head, the author found, just above the left ear, a resisting tumour about the size of a bean, covered by healthy skin, and exhibiting traces of a delicate cicatrix. Pressure on this gave great pain, and aggravated the cerebral symptoms. Cutting into the tumour, the blade of a poniard-knife (nearly 10 centimètres long, and about 12 millimètres broad, with a back of about 3 millimètres), was extracted. A probe carried into the track whence the knife had been extracted, passed quite horizontally, so that no doubt could remain that this blade had been buried within the cerebral mass for 2 years and 8 months. The patient went on well and recovered his mental energies—epileptiform attacks, which had followed the injury, having diminished in frequency.—*Revue Méd.*, March, p. 348.

Question of Live-Birth.—The capital sign of an infant's having been born living is its having respired, and a proof of its having breathed is afforded by the hydrostatic test. But a child may have executed the mechanical act of respiration, and yet the air, in the absence, even, of all strangulation, not have penetrated into the pulmonary vessels. MM. Dégranges and Lafargue have related such a case to the Nantes Medical Society. The body of an infant was brought to them found face downwards in a ditch containing dirty water, the child exhibiting every sign of viability, and no external marks of violence. At the autopsy semi-coagulated blood was found under the skin of the cranium in two places, and the tissues of the face were much ecchymosed. The interior of the nose, mouth, and pharynx contained some vegetable detritus and some mud, this latter extending into the trachea and bronchial ramifications. The lungs were undistended and non-crepitant, and readily sank in water. Thus, although the lungs contained no air, the child had virtually respired, since the muscles of the thorax had executed an act of inspiration, introducing a muddy liquid into the respiratory passages. The infant was pronounced by the experts, therefore, to have lived, the coagulum under the scalp offering corroborative proof thereof. The jury, however, basing their verdict upon the infant not having breathed air, acquitted the accused of homicide. She was found guilty, under another jurisdiction, of the "omission of necessary cares," and condemned to two years' imprisonment.—*Gaz. Hebd.*, No. 32.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

Paris, August 20.

ANOTHER ANNEXATION BY THE FRENCH.

M. Plouviez has recently directed attention to an entirely new method for distinguishing apparent death from the real, which he considers likely to supersede all other methods which have been in use up to the present time, and which is perfectly secure. He says that in order to arrive at a satisfactory conclusion it is only necessary to thrust an acupuncture needle into the heart, and then to observe whether the needle remains quiet or oscillates to and fro. If life is extinct the needle will remain motionless, but if, on the contrary, the individual operated upon is only in a trance, the most feeble pulsations of the heart are distinctly shown by the oscillations of the needle. In a rabbit which had been fully brought under the influence of chloroform, and which appeared to be quite dead, no sounds of the heart could be perceived by auscultation, while the needle, when thrust into the heart, soon began to oscillate, at first feebly and afterwards more strongly, until at last complete recovery took place. It is an unfortunate circumstance for M. Plouviez that this *entirely new* method has already been proposed by Professor Middledorpff, of Breslau, more than five years ago (Günsburg's *Zeitschrift für Klinische Medicin*, vol. vii., part 5), in a paper in which he fully described the way in which this operation should be done, and distinctly mentioned that this acupuncturing of the heart was devoid of any danger. So many annexations of German property, real and scientific, have, however, been made by ingenious Frenchmen that one more or less is scarcely a matter of consideration.

ON THE INHALATION OF PULVERISED MINERAL WATER.

This proceeding, which was introdueed into practice by Dr. Sales Girdon, has been in vogue in this country for some time. In many of the French watering-places contrivances for performing this operation are used, and even small transportable machines have been constructed for pulverising the mineral water and respiring it. This egregious humbug has at last been exposed by Dr. René Briau, of Eaux-bonnes. According to him pulverised mineral water never arrives in the air-passages, their structure being of a kind as to preclude contact with anything but the atmosphere or an analogous gaseous mixture. Even pure steam is only tolerated when greatly diluted with air. Every liquid on first entering the larynx causes cough by reflex action, as shown by the therapeutical experiments of Trousseau, Bretonneau, and Barthez; and this was not produced on using Dr. Girdon's method. In 47 patients treated by Dr. Briau at Eaux-bonnes, this Physician has satisfied himself that the pulverised mineral water was immediately condensed in the mouth and pharynx, and then ran away in a fine stream down the chin. Besides, it appears that only a tenth part of the water used in these experiments became really pulverised, and that even of this only very little arrived in the mouth, most of it being miscarried to neighbouring parts. Experiments made with a pulverised solution of perchloride of iron on dogs and horses showed that nothing of this substance penetrated to the bronchi, and that Dr. Sales Girdon's "Thérapeutique Respiratoire," which was introduced to the Medical world with a loud flourish of trumpets, is nothing more than a farce.

LEAD-COLICS.

In all cases of lead-colics unaccompanied with fever, Dr. Paul recommends the external application of ice for mitigating and subduing the pain, and for opening the bowels. Several cases of this affection were recently treated by this means, with the best success, in the Hôpital Lariboisière. Bladders filled with ice are placed on the abdomen for one or two hours, two or three times a day. The bowels are by this means voided of their contents, even if clysmata and purgatives had failed to effect this. It remains, however, to be seen, whether Faradisation of the skin of the abdomen, which has also been very much employed of late for reducing hyperæsthesia in lead-colics, is not a more certain and quicker remedy than ice.

Dr. Paul's observations on the influence of lead poisoning in the mother on the fœtus, extend at present to 89 cases. In these there occurred 141 pregnancies, amongst which were 82 miscarriages, 4 premature births, and 5 still-born children; amongst 52 infants, which had been born at the right time, 20 died in the first year, 8 in the second, and 7 in the third.

THE BLIND AND THE DEAF AND DUMB.

A general report on the deaf and dumb, the blind, and the institutions for their education which exist in this country, has recently been sent in to the Minister of the Interior by the Baron de Watteville, the general superintendent of the benevolent institutions of France. There are now in the 89 departments of the Empire, 21,576 deaf and dumb, amongst which 12,325 are males, and 9251 females. The largest average number is found in mountainous regions, as in the high Alps there is one deaf and dumb person in 419, while in Paris there is only one amongst 4694 inhabitants. There are 47 institutions for the education of the deaf and dumb, of which the two largest are administered by the State. The blind are more numerous than the deaf and dumb, as the last census puts their number at 30,214, amongst which are 6469 males and 18,745 females. The average number for the whole of France is one in 1200 inhabitants. The largest Institute for the education of the blind is that in Paris, which was founded in 1784.

DEATH OF A QUACK.

M. Giraudeau de St. Gervais, the inventor of the Medical *réclame* and advertisement, died here a short time ago, leaving a fortune of four million francs (£160,000). This individual was possessed of two *robs* for curing every syphilitic disorder, namely, the *rob Végétal Anti-syphilitique*, and

the *rob Boyveau-Laffecteur*. By simultaneously advertising both, he created an apparent rivalry and antagonism between the two nostrums, and thus caused the interest of the public in them never to flag. His yearly expenses for advertisements amounted to 200,000 francs (£8000), and he had succeeded, nobody knows how, in obtaining the Greek Order of the Redeemer, and the Cross of the Legion of Honour. *Requiescat in pace.*

WHOOPING-COUGH.

A note on the peculiar views entertained by M. Beau on the pathology of whooping-cough may be of interest to your readers. According to this Physician, pertussis consists of a purulent inflammation of the infundibulum above the glottis; and the paroxysms of cough are caused by drops of pus falling on the vocal chords; just as cough is often produced by other foreign bodies coming into contact with the mucous membrane of the larynx. M. Beau has satisfied himself of the correctness of his views by three post-mortem examinations; and M. Wannebroucq has added to them two others, in which the same pathological changes have been found. The laryngoscope, which has now become an indispensable means of diagnosis to the Physician, would certainly afford the best chance of coming to a satisfactory conclusion on this point, if the affection was not an almost exclusively infantile one, and a laryngoscopic examination is all but impossible in children. M. Beau has, however, recently observed a case of whooping-cough in a nurse-maid, aged 18, who had been infected by the baby confided to her charge, and in her the laryngoscope could be used. The examination with this instrument showed swelling and redness of the mucous membrane of the larynx, which was most intense on the epiglottis and the upper vocal chords, where grey and yellow, somewhat prominent, spots were observed, which during the intervals of the examination changed their place, and therefore evidently consisted of muco-pus. M. Beau considers that whooping-cough is an affection allied to purulent conjunctivitis, otitis, etc., which are also very frequent in children, especially in scrofulous infants, in which pertussis, as is well known, is most frequent, intense, and obstinate.

INTERMITTENT WRY-NECK.

At a recent meeting of the Société de Chirurgie, M. Legouest introduced a patient, a soldier in the Guards, who suffered from torticollis, and whose case may be of interest to your readers, as a sequel to the cases of spasmodic wry-neck lately described in your columns by Dr. Althaus. If the patient kept quiet, he could hold his head quite straight, but as soon as he began to walk it fell towards the right side and a little forwards, and could only be brought back to its right position by the hand; when this was done, the patient felt a cracking noise at the left mastoid process. This affection had lasted for eighteen months, and no treatment had been of any avail. M. Legouest, who had never seen a case of this kind before, believed it to be one of disease of the atlas; but M. Bouvier, Physician to the Hospital for Sick Children, one of our first authorities on the diseases of the nerves and muscles, and M. Robert, Surgeon to the Beaujon Hospital, declared it to be a purely muscular affection. M. Debout has recently seen a similar case, in which Faradisation of the antagonistic muscles proved curative.

ON EMPHYSEMA OF THE LUNGS IN CHILDREN.

M. Hervieux, who has made a series of researches on the above affection, recently communicated the results of them to the Société Médicale des Hôpitaux de Paris. Emphysema of the lungs is more frequent in the first few months after birth than at any other period of the early infantile life. It is either vesicular and cystiform, or interlobular. The former generally occupies the anterior third of both lungs, the diseased parts of which are anæmic and whitish; and the surface shows either numerous small, transparent, and shining points, similar to the air-vesicles which are seen to adhere to the walls of a tumbler filled with water, or regularly-arranged little polygones, like mosaic, the intervals of which are transparent and filled with air. Interlobular emphysema differs from the vesicular form, by occupying all parts of the lungs, and taking the form of spheroid vesicles arranged as rosaries of variable size and numbers. The emphysema may spread to the mediastinum, and from there proceed to the subcutaneous cellular tissue of the whole surface of the body. The heart does not show any of those changes which it presents in emphysema in the adult; and the symptoms generally observed are not striking enough to allow of an accurate diagnosis. A prognosis is therefore scarcely possible; but it seems that the affection does not always prove fatal. The causes of emphysema in children are either immediate or remote: amongst the former range pneumonia, tuberculosis, apoplexy, and gangrene of the lungs; amongst the latter gastroenteritis, syphilitic diathesis, muguet, erysipelas, etc. The influence of whooping-cough in causing emphysema is, however, not so great as it is generally believed to be.

ITALY.

FLORENCE, August 28.

THE WEATHER.

MUCH news from a Cisalpine correspondent cannot be expected at this time of year. For the last three weeks the thermometer has ranged between 86° and 98°, and although the inconveniences arising from such a temperature are somewhat lessened by its very duration, it never fails to exert its paralysing influence on all mental and physical pursuits. Everything like exertion is abandoned, open questions are shelved and decisions postponed until the much-sighed-for *rottura del tempo* (breaking up of the weather), which, under the form of a few refreshing storms, usually takes place towards the end of August; although weather-wise people do not expect it this year before the middle of September. It cannot be denied that long and steady heat, provided it be not interrupted by rainy or sultry days, has its hygienic advantages. Such seasons are generally healthy,—at least such is the case here—and zymotic diseases are rarer under such circumstances than might be expected, considering that the atmospheric ozone is at its minimum during these months. I have observed that certain insects, especially mosquitoes, flies, and sand-flies, are less troublesome and often disappear altogether after a few weeks' heat, and it is but natural to infer that the absence of moisture and the perfect equilibrium of electric tension which are peculiar to such seasons, may offer the most unfavourable conditions to those microscopic organisations, in which modern science has detected the real and tangible manifestations of the so-called *genius epidemicus*. Much reasoning on this subject is of course idle, so long as our knowledge of atmospheric changes and influences cannot be raised to the rank of a science. But the fact is undeniable that intense and protracted heat, which is rare even in Italy, and which has nothing in common with the sultry and unsteady heat of northern summers, is most unfavourable to the generation and spreading of zymotic diseases. Even the oïdium of the vines showed its first decline in the very hot summer of 1859, and having again reached its former intensity in 1860 when we had scarcely any summer at all, it seems to have almost entirely disappeared this year, which so far as Italy is concerned will certainly figure amongst the hottest on record.

MILIARY FEVER IN TUSCANY.

A few weeks ago, just before the great heat had set in, and before the atmosphere had found its midsummer equilibrium, a circumstance occurred in Tuscany which deserves especial notice here, as, without militating against the above-mentioned theory, it shows how little we yet know of those laws which regulate epidemics, especially those which cannot be considered as strictly zymotic. I am speaking of the sudden breaking out of a miliary epidemic in a little town in the heart of Tuscany—a place not otherwise distinguished by any topographical peculiarity. The disease was at once so virulent and attacked so many persons, that the local authorities were obliged to send to Florence for professional assistance, the small Medical staff of the place being insufficient for the sudden increase of patients. As soon as the two Medical gentlemen sent thither have returned to this place, I shall be able to give you some particulars about the nature of this strange epidemic. I say strange, because the miliaria being chiefly a symptom of, or co-existing with, inflammations of serous and mucous membranes, is naturally apt to appear at any other season rather than in summer. The recent epidemic therefore, will go far to show that under the name of miliaria, more than one disease has been smuggled into our Florentine

nosology, and that those who see in the non-critical nature of miliary eruption and in the general ataxy of the symptoms a sufficient reason for identifying altogether miliary fever with typhoid fever, are at least not farther from the truth than those who consider the miliaria as a well defined *ens nosologicum*, which like the specific virus of other acute exanthemata, either appears in form of an eruption, or remains latent without losing its specific character. Whatever may be the respective merits of these doctrines, it is certain that this latter hypothesis of a latent miliaria (which has of course to be duly exorcised *secundum artem*), has become a most dangerous and most mischievous tenet, especially when acted upon by those inferior practitioners who readily seize upon theories and rules without having inherited their master's intuitive knack for recognising the exceptional. Although I cannot pretend to contribute towards the solution of this difficult question, yet the subject is of such importance, not only to science, but also to the many strangers who visit Tuscany in search of health or pleasure, that I shall consider it a duty to call your attention to all facts relating to this so-called Tuscan disease, were it only to warn your non-professional readers against the unnecessary and dangerous weapons used against it.

ITALIAN SURGERY.

In a pamphlet just published by Dr. Canettoli, of Bologna, who is now practising in Rome, an account is given of some surgical cases and operations successfully performed by the author. The first case, the excision of a uterine polypus, offers nothing very remarkable. The second case is that of a boy aged twelve years, who had not less than five polypi, three in the pharynx, and one in each nostril between the turbinated bones. Four of these were removed by excision and one by twisting. But the third case seems to be particularly interesting in a surgical as well as in a physiological point of view, and I will therefore give you a brief account of it. A man sitting near a marble table and rocking his chair on its front legs, fell with his head against the sharp edge of the marble slab, thereby receiving a wound one inch and a-half in length. Blindness of the right eye and ptosis of the right eyelid followed immediately and Dr. Canettoli soon discovered that the frontal nerve had been completely severed. The wound was dressed, and for three days the patient remained quite free from pain, nor was he troubled by any symptom of depression or irritation, that might betray a concussion of the brain. The wound had closed and the patient was just preparing to leave town, when on the fourth day after the accident, he suddenly felt severe pain in the cicatrix accompanied by spasmodic contractions of the muscles of the eye and the eyelid, and also a peculiar trembling of the tongue which greatly impaired his speech. Fever soon followed and Dr. Canettoli at once resolved to divide the frontal nerve right below the wound and a little above the right eyebrow. This operation put a stop to the spasms, while the amaurosis and blepharoptosis remained as before; and in addition the symptoms of severe meningitis, with fever and delirium, set in on the day following the division of the nerve. The right eye, which was already blind, also became inflamed, and the left one could no longer bear the light. Venesection having been twice resorted to without benefit, Dr. Canettoli, on the seventh day after the accident, opened the jugular vein. This was speedily followed by cessation of the cerebral symptoms, while the inflammation of the eye only gradually decreased and not without using external remedies. It seems that only when the last trace of the ophthalmia had disappeared, the two symptoms began to abate which had preceded the inflammation, viz. ptosis and amaurosis; until at last, after six weeks, vision as well as the movement of the eyelid, were completely restored.

It is well known that doubts are entertained by some Surgeons as to whether a lesion of the frontal nerve can cause amaurosis. The present case would go far to prove that this may occur, were it not that the wound had been caused by a fall, however short the distance between the patient's head and the edge of the table may have been. Dr. Canettoli, however, without denying that a certain degree of concussion may have taken place, remarks that this must have been of so slight a character, that it would not by itself have produced such severe meningitis, if the patient had not previously twice been subject to inflammation, and that considering the entire absence of morbid symptoms during the first three days, it is more natural to suppose that the meningitis was caused by a "phlogistic radiation," (reflex irritation) from the cicatrix, which could, of course, only begin after the cicatrix had been formed, while the immediate and instantaneous results of the fall, viz. blindness and blepharoptosis, must be accounted for by the anatomical connexion existing between the frontal nerve and the ciliary ganglion, which again communicates with the optic nerve, and through its third root is connected with the cervical ganglion of the sympathetic nerve. This seems very fair reasoning. If, as Dr. Canettoli alleges, excitation of the frontal nerve may sometimes more or less transitorily restore vision, provided the optic nerve has not yet undergone any structural change, it is *à priori* possible, that a traumatic lesion of the former might produce temporary or permanent paralysis of the latter, without concussion of the retina or inflammation of the brain. The spasms of the tongue, which were noticed on the fourth day previous to any inflammatory symptoms, and which ceased as soon as the frontal nerve had been divided, may perhaps be similarly explained by the connexion which exists between the hypoglossus and the ciliary ganglion, as galvanic excitation of the former causes dilatation of the pupil.

AUSTRIA.

Vienna, August 22.

THE EMPRESS OF AUSTRIA.

The Empress of Austria, who, as your readers are aware, went some time ago to Corfu, under the care of Professor Skoda, for tuberculosis of the lungs, is reported considerably improved. The heat in Corfu is at present very great, amounting to 95° F. at mid-day, to 77° in the evening, and only a little less in the morning. Sudden changes of the temperature, however, never take place, and even after sunset walking in the open air is not injurious to the patient. The climate of Corfu agrees remarkably well with the Empress, and the infiltration of the lungs, which had made alarming strides of late, has become stationary. The cough has quite ceased, and the general health of the illustrious patient is much improved. It has not yet been determined where the Empress will pass the winter, but it is settled that she leaves Corfu on its approach, as the winter there is not suitable for delicate patients suffering from diseases of the chest.

ON THE SPONTANEOUS CURE OF OPACITIES OF THE LENS.

At a recent meeting of the Vienna College of Physicians, Professor Jaeger introduced two patients, one of whom suffered from an opacity of the cortical substance of the lens, which instead of spreading further, had remained stationary for a long time; in the second patient the opacity, after having existed for two years, had decreased in extent, and at last entirely disappeared, it having undergone spontaneous retrogressive metamorphosis. This spontaneous cure of cataract occurs especially in young persons, where the general metamorphosis of matter is rapid, and where the opacity is superficial and confined to the cortical substance; while the affection becomes stationary mostly in partial opacities, in congenital cataract, and in traumatic inflammation of the choroidea. In senile cataract, and in cases where the opacity is extensive, a retrogressive metamorphosis can scarcely be expected, and a Medical treatment can promote the absorption of cataract in such cases only where we can remove the causes of the complaint, which is only possible in an exceedingly limited number of cases.

"PARAGUAY TEA."

At the same meeting Dr. Pellischek showed a specimen of the Maté, or Paraguay tea (*Ilex Paraguayensis*) which had been brought over by a gentleman who took part in the Austrian expedition round the world in the *Novara*. The ingredients of this plant are similar to those of tea and coffee; but the chief alkaloid contained in it is ilicine. It grows wild; but the Government allows its collection only on the payment of a considerable duty. At the time of the harvest whole caravans proceed to the forests to gather the leaves; the finest sort is the leaf in bud (*kaa ku*); the second, the developed leaf (*kaa mûri*); and the third, the leaves and stems (*kaa kmatja*).

ON THE ELIMINATION OF MERCURY FROM THE SYSTEM.

Dr. Schneider has recently made some researches on the

elimination of mercury during and after a mercurial treatment, which have given the following results:—During the internal administration of such preparations, the electrolytic examination of the urine shows always traces of mercury; but the quantities are so small that the amount of urine discharged within twenty-four hours is often not sufficient for a satisfactory result, and the metal must be searched for in the whole of the urine discharged within three to six days. Traces of mercury were also found in the urine of a patient who had not taken it internally, but had been treated with mercurial ointment. The elimination of the drug by the urine lasts for some time after the mercurial treatment has been discontinued. In the first week afterwards it is invariably found, and in two cases it was even discovered in the fourth and the sixth week afterwards. After six weeks Dr. Schneider has never succeeded in discovering traces of mercury by electrolysis. The elimination of it is not promoted by the administration of iodide of potassium, as the quantity of mercury contained in the urine was not at all increased, but rather diminished, when that drug was given; and if it was taken a few months after the end of the mercurial treatment, mercury did not re-appear in the system, probably because nothing was left behind. One patient who had suffered from syphilis for five years, and had been three times treated with mercury (the last time very energetically, having used twenty drachms of ointment, equivalent to more than 120 grains of mercury), died of pericarditis two months after the third course, and Dr. Schneider could therefore search for mercury in the internal organs. The result was that the bones, the brain, and the spleen, which are generally believed to retain mercury for years, did not contain a trace of it, while the kidney showed an infinitesimal quantity of the metal, the result of the examination of the liver being doubtful. It is, therefore, evident that mercury entirely disappears from the system a short time after the end of treatment, and cannot, therefore, cause secondary syphilitic symptoms; nor can it be eliminated from the system years after the treatment by Dr. Caplin's electro-chemical baths. In two cases of hydrargyrosis considerable quantities of mercury were discovered in the urine, and in one of them, which ended fatally, also in the internal organs, especially in the liver. Urine which contains mercury does not necessarily contain albumen also; but in the two last-mentioned cases of hydrargyrosis there was albumen in the urine. The saliva which is collected during a mercurial treatment does not contain any mercury. The quantity of mercury which is eliminated after the end of the treatment amounts to about one-fourth of that actually administered.

GERMANY.

Munich, August 25.

ON THE APPARATUS FOR RESPIRATION AND PERSPIRATION IN THE PHYSIOLOGICAL INSTITUTE OF MUNICH.

Many methods have been used for determining the quantity of carbonic acid and water excreted by the skin and the lungs; and most interesting results have been obtained by the application of the contrivances constructed by Messrs. Scharling, Vierordt, Valentin and Brummer, Regnault and Reiset, Edward Smith, and others, with which every physiologist and chemist is acquainted. There were, however, two objections to be made to all the methods hitherto used for researches on man and animals; viz. that their degree of accuracy could not be ascertained by cross-experiments with known quantities of carbonic acid, and that man and animals were compelled to respire during the experiments under more or less unusual, troublesome, and therefore unnatural conditions. Professor Pettenkofer has for years directed his attention to this subject, and has endeavoured to ascertain how we might accurately determine the quantity of carbonic acid given off by a man breathing and moving freely in the fresh air, without the intermedium of any apparatus whatever. The researches of Messrs. Bischoff and Voit on the nutrition of carnivora have shown that the carbonic acid which escapes through the skin and the lungs cannot be correctly calculated from the difference of carbon between the ingested food and the ejested urine and fæces, regard being had to the weight of the body; because two unknown substances (carbonic acid and water) escape at the same time, and in different proportions, through the skin and the lungs. It was, therefore, necessary to determine directly one of these two quantities, and Professor Pettenkofer conceived that this could only be done by conducting a current of air, of known and invariable strength over a man, and then determining the addition of carbonic acid and water to this current of air.

As pattern for such an apparatus, the learned Professor took the ordinary stove of an apartment. As long as there is a thorough draught in the chimney, no smoke escapes through the joinings and the door of the stove; but the air presses from without everywhere on the stove, in order to ascend the chimney. If an accurate measurement of the quantity of air moving in the flue, which conducts the smoke from the stove to the chimney, can be made; and if the composition of the air which enters and leaves the stove, can be ascertained by examining a fraction of it, all conditions are fulfilled which are necessary for showing that which, during combustion in the stove, is mixed with the current of air. Professor Pettenkofer now thought that it would be the best plan to construct, within a large apartment, a small room of sheet-iron, in place of the stove. This small room should be of five feet square, and furnished with an iron door, with a skylight, and windows. The latter should be cemented as air-tight as possible, and the walls and the ceiling should be soldered as air-tight as possible. The door should be furnished with moveable openings, for rendering possible the entrance of air through other points than on the hinges, according as it might be required. On the side opposite to the door two openings, one below and the other above, should pass by two flues outside of the small room, into a single large flue, in which the air streams towards that part of the apparatus which serves as a chimney. This part, which should be placed in another room of the house than that in which the iron room is, should consist of two sucking cylinders with ventilating valves, which should be equally moved at an *ad libitum* height, by means of a strong clock-work. The falling weight of the clock-work should, in proportion as it sinks, be centinually wound up again by means of a small steam-engine, so that an *ad libitum* and invariable quantity of air should be kept streaming through the door of the iron-room towards the sucking cylinders. The air would then not be able to arrive in these cylinders before having passed through a continually working apparatus for measuring its quantity. A large gas-meter, of such dimensions that 3000 cubic feet English might be accurately measured with it within the hour, seemed for this purpose to be necessary to Professor Pettenkofer. In order to examine a fraction of the air which would enter the openings of the door and other crevices that might perhaps exist, and which would stream out through the common flue from the apparatus towards the gas-meter; and in order to calculate from the obtained differences of the water and the carbonic acid that quantity, which had been added to them within the apparatus, two aspirators appeared to be necessary, each one of which would suck simultaneously an equal proportion of air. The water mixed with the air, should then be absorbed by sulphuric acid, and weighed; the carbonic acid should be measured by sucking the air in fine vesicles through a certain quantity of lime-water, and by ascertaining the quantity of caustic lime contained in the lime-water, by means of titration with diluted oxalic acid. In order to take a sample of the air which would remain in the iron-room, a sucking and pressing pump should then be connected with the flue, by means of which bottles containing from six to eight litres might be filled with air, the carbonic acid of which might be determined by adding lime-water to it. The same pump would also serve for ascertaining, during an experiment, the variations of the carbonic acid in the current of air at different times. A contrivance should also be added to this, by means of which *ad libitum* samples of any amount could be taken, without causing a loss of air for the measurement of the whole current. This could be done by connecting an air-tight bottle with the pump, and completely replacing the air originally contained in the bottle, with air from the flue, by setting the pump in motion for some time. The air which would have been pressed out of the bottle, should then not be allowed to escaped into the atmosphere, but should again, by means of a caoutchouc tube, be conducted back to the current which goes towards the gas-meter; at such a point, of course, where the measurement of the carbonic acid would not be disturbed by it. In order that the current of air might not

carry water by evaporation from the large gas-meter, the air should go, previously to entering the gas-meter, through a standing cylinder filled with pieces of moistened pumice-stone. Where the air leaves this latter apparatus, a psychrometer should be connected with the flue, for measuring the temperature and the moisture of the air. At the entrance into the gas-meter, a psychrometer and several nozzles for tubes should be fitted in, before the pumice-stone apparatus, in order to allow taking samples of air, etc.

After Professor Pettenkofer had communicated this plan to the President of the Academy, Baron von Liebig, and some other colleagues, it was laid before the Technological Committee of that learned body. This committee made a report on it, in consequence of which, King Max, who is never loth to promote the interests of science, gave 4000 florins out of his private purse for the construction of such an apparatus of respiration. This is the first machine of its kind in which observations may be made under normal conditions. One may live in it, as in any well aired apartment; one may take exercise, work, eat, and sleep in it, according to one's custom. Food and other things may be taken in and out through a moveable window in the door of the room, without disturbing the experiment, just as we may open the door of a stove, in order to poke the fire, or to take out the ashes, without having to fear an escape of smoke into the room, provided there is a thorough draught in the chimney. Another individual, who is outside of the iron room to control the experiment, does not, by his respiration, disturb the result in the least, for the quantity of carbonic acid contained in the air which enters the room, is continually controlled by one of the two apparatuses, and can therefore be easily subtracted. By means of this ingenious contrivance, all problems in vegetable and animal physiology, as far as an increase or a diminution of carbonic acid and water in the air are concerned, may be solved under normal conditions, and in as exact a manner as was impossible before. It has been used now for the last twelve months, and numerous researches have been made with it by Professor Bischoff on man and animals, the results of which I shall communicate to you as soon as they are made known.

MANCHESTER.

(*From our Special Correspondent.*)

September 9.

I send you a report this evening, giving an outline of the doings of the "British Parliament of Science" during its present sitting up to this time. As you know, the Session was opened on Wednesday last. On that day the arrival of visitors was great, and the promise of a successful meeting as great as could be wished. I may state at once that these anticipations have been fully realised: this is at once the most interesting, useful, and numerously-attended meeting that has ever been held. It is obvious that the Manchester men have a true claim to the title they have earned of being men of business habits *par excellence*. This meeting, if nothing else were wanting, would give them that character. Not a single point has been overlooked. In the Portico, where all the Members do congregate, and receptions are made, there is a post-office, and positively a telegraph office, attendants of every description, tables for correspondence loaded with conveniences, and papers giving accounts of the day's proceedings in rich abundance. In the Sections there is an attention to minutiæ, and an elegance without any unnecessary display, which offer great facility to the advancement of the business in every department.

The Address of the President, as the first and important part of the proceedings, has been received with universal approbation. It was delivered with unaffected simplicity, and although it naturally partook largely of the mechanical element as subject of discourse, it embraced a wide survey of science in all its departments. On the night following that on which the President opened the meeting, there was a *conversazione* in the Free-trade Hall. The microscopical display was brilliant, and nothing could be richer than the provision made for the assembled guests; but, in fact, the treat was embarrassing from its very richness, and the treat itself was embarrassed by the attentions lavished upon it. The meeting was an overwhelming crush,—very hot, very bright, and fearfully fatiguing.

Friday night brought with it the third chief event, a lecture by Professor Miller, in the Concert Hall, on "Spectrum Analysis." Talk about Science not making way in this kingdom! Why, surely the most determined misanthrope on this point might have slept in peace could he have seen the congregation to which Dr. Miller addressed himself. The large Hall was crowded to excess with ladies and gentlemen of all ages and opinions, and expectation reached its highest pitch as the platform filled, and the look out for the President became anxious. The shade of Beethoven never lingered over a broader sea of faces, when its own mortal music was rolling forth in the same place, than was presented on that night. The Professor was, of course, enthusiastically received, and the subject was as choice as could have been desired—admirably suited to the comprehension of an audience such as was present, and fitted for a display of eloquence of any degree of power; but the result, it must be confessed, did not come up to the full. The lecture went off without criticism, but not with unabated admiration. We can clearly understand the difficulties of Dr. Miller's position: he had to be learned and yet popular, clear and yet profound. Further, the presence of such an audience was critical; the pitch of the voice, to make it reach the further gallery, was a point in itself of no mean interest. We feel all this, and are not inclined to offer any complaint of moment; but there was one error in the arrangement of the subject-matter which must not be overlooked, because it spoiled the effect in an artistic point of view. The Professor endeavoured at one and the same time to carry us down two parallel lines—the one a line of history in relation to discovery, the other a line of exposition of phenomena. For a brief period this endeavour was sustained, but, unfortunately, as the speaker went on, and from discourse turned to experiment, the two subjects became confused, and in the end, while no clearly-exposed order of discovery remained on the mind in reference to spectrum analysis, the principles on which the new science rests were left without definite exposition. With it all, the audience was determined to be pleased, and the learned Professor, not a little exhausted, we should judge, received (in a speech by Dr. Robinson) a vote of thanks with acclamation.

On Saturday we had a fourth evening in the Telegraphic *conversazione*, during which Mr. Grove, of Grove Battery fame, made a short address, and read a message from the Prince Consort at Balmoral making kind enquiries, to which a suitable answer was of course at once despatched. This *conversazione* was, like the former, crowded to excess; but what is to be done when three thousand people claim admittance to one room, and within an hour or two demand a sight of at least three thousand wonders?

So far I have spoken of the general meetings; now for a few words respecting visitors, the business of the Sections, and those subjects which are of nearest concern to ourselves. The Medical element is well and fully represented. I noticed present, Dr. Simpson, of Edinburgh, Dr. John Davy, Sir John Richardson, Dr. C. J. B. Williams, Dr. E. Smith, Dr. Borchardt, Dr. Richardson, Dr. Laycock, Dr. Priestley, Dr. Williamson, Dr. Remak, of Berlin, Dr. Rolleston, Professor Owen, Dr. Lankester, Dr. Roget, Dr. Wood, of Philadelphia, Mr. Toynbee, and many others whose names we are familiar with. Taking it altogether, I may say that the science of Medicine has at no previous meeting shown a better front to the world, and that the Section, or rather Sub-Section D,—Physiology—was never before so well attended. It is now, indeed, being universally felt that Physiology should no longer be a Sub-Section of Zoology, and that it should stand either as an independent Section, or that one great Section of "Biology" should be instituted, which might afterwards, without any detriment or offence, be subdivided into two or three co-equal Sections, viz., Physiology, Zoology, and Botany.

Barring a brief note to the effect that in the Zoological Section the Darwinian theory was on Saturday brought forward by Mr. Fawcett, and that perhaps, on the whole, Darwin had the best of it, I know of no paper which would especially interest your readers out of the Physiological and Chemical Sections; indeed, in the Chemical Section, the subjects in the main have been rather wide of Medicine; it will consequently be the physiologists of whom I shall have principally to speak.

The Physiological Section has for its President Dr. John Davy; for its Vice-Presidents Drs. Sharpey, Williams, and

Rolleston; for Secretaries, Drs. E. Smith and William Roberts; and for Committee, Milner, Aspland, Richardson, Gibb, Borchardt, Noble, Roberton, Ransome, Wilkinson, and Brooke. The sub-section opened on Thursday morning, and has continued every day since from eleven to three. The President, Dr. Davy, has read, during that time, three papers:—1. "On the Action of Lime on Animal Matter;" 2. "On the Blood of the Common Earthworm;" 3. "On the Question, Whether Hair is, or is not, Subject to Sudden Changes of Colour." The last-named paper of this series excited most interest, and a warm discussion took place upon it. Dr. Davy maintained the position that there is no real ground for accepting the historical stories respecting the turning gray of the hair suddenly as an effect of mental emotion. Dr. C. J. B. Williams in the main agreed with the President; Dr. Windsor took a similar view; Sir John Richardson offered a kind of mid-way explanation; and Mr. Strickland declared for the affirmative of the question in very determined argument. Dr. Williamson, in an eloquent speech, separated the question from one with which it had been confounded, viz., the sudden changes of colour in birds, and defended Mr. Strickland.

(To be continued.)

GENERAL CORRESPONDENCE.

DIGITALIS IN DELIRIUM TREMENS.

Letter from Dr. D. M. Williams.

[To the Editor of the Medical Times and Gazette.]

Sir,—As the treatment of delirium tremens by digitalis is now fairly upon its trial, I think the following case may not be without interest:—

At noon of Wednesday, August 28, I was requested to see a private patient, whom I have cured of delirium tremens on two previous occasions by a single subcutaneous injection of ⅓rd grain of sulphate of morphia, dissolved in ♏xx. of water. Since the last attack he had been perfectly sober, until August 13, when he began to drink, but continued to eat as usual until the 20th, from which time he drank brandy, and continued doing so up to the day I saw him. He became delirious on the 26th, and slept none during that or the following night, nor had he eaten food since the 20th.

When I saw him he was perfectly furious, almost naked, and struggling to get out of the house; with difficulty I ascertained that the pulse was 108. 2 p.m.—Administered tinct. digitalis, ʒss., and persuaded him into bed. In twenty minutes the pulse had fallen to 96, full and soft; tongue loaded. He was still very much excited, and I thought the lowering of the pulse was due to position and soothing conversation. To have another ʒss. tinct. digit. at 4 o'clock. 5 p.m.—An hour has elapsed since he took the second dose of the tincture; he has been extremely wild and restless, excepting once, when he seemed to fall into a quiet doze for a few minutes, but awoke as mad as ever. Pulse 96, full, soft, and regular; skin cool, but as he is almost naked, and cannot be induced to lie in bed covered, that is easily accounted for. To have another ʒss. tinct. digit. at 7 o'clock. At 10.30 p.m. had become more manageable, and has been quieter since 6 o'clock; pulse 96, but wiry, with an uncertainty about an occasional beat; has slight nausea, will take no food, but wants beer continually; to have a little brandy and lemonade during the night, and as much beef-tea as he can be induced to take.

29th.—10.30 a.m.—Has had a bad night, has not slept more than an hour and a-half since he took the first dose, but has been vomiting and purging very much all night, with violent palpitation of the heart between 6 and 10 o'clock this morning. He attempted to take beef-tea, also brandy and lemonade, but vomited everything; he is, however, quite quiet, talks rationally, and complains much of the palpitation. Pulse 86, full, soft, and steady; skin comfortably warm and moist, tongue cleaner; to take ʒss. every three hours of the following mixture, and as much food as possible:—℞ Bismuth subcarb. ʒij., sol. morph. ʒj., æther chlor. ʒjss., mucilage Arab. ʒss., aquæ ad ʒviij., M. 10 p m.—Has spent the day at Eastham, where he took six and a-half glasses of brandy, but no food or medicine. Has had no vomiting or purging since morning; kidneys have acted throughout as usual. He is now quite quiet, but provokingly obstinate, and craving more brandy; pulse 96. All stimulants forbidden; to take his mixture and as much milk, beef-tea, etc., as possible during the night.

30th.—He is so much better of his delirium that his friends allowed him to go to Scaforth alone, as he complained of being ill, and thought a little change would enable him to return to business quicker. His wife says he has had a good night, and she thinks he slept a good deal, has had no stimulants, but drank a large quantity of milk, and from this time steadily recovered. I am, &c.

Liverpool. D. M. Williams, L.K.Q.C.P.I.

NIHILISM.

[To the Editor of the Medical Times and Gazette.]

Sir,—An article in the *Medical Times and Gazette*, about a month ago, on what was termed "Nihilism" in Medicine, touched on a subject which appears to me of great importance.

The most vigorous system of quackery of our day is one which has distinct reference to the method of administering drugs. In opposing this quackery, Medical men must know accurately not only what weapons to use, but how to use them; for only he despises a useful art who is ignorant how to practise it. It is principally due, I believe, to an imperfect education in the science of Therapeutics that so many Practitioners find, at first, their knowledge of drugs to be limited, both in extent and in kind. In the lectures on Materia Medica at the Medical Schools, too much attention is directed to the natural history of drugs, and to their value as commercial articles,—subjects which more properly fall within the scope of the pharmaceutical chemist, and hardly ever come before Doctors to decide. In clinical lectures, again, and especially in bed-side expositions, the student hears the pathology and diagnosis of disease amply and even minutely discussed, but the medicines prescribed are dictated almost whisperingly to the clerk, and seldom are any reasons offered for the selection of a particular drug or drugs from their physiological congeners.

I recently met a "Member of the College" and "Licentiate of the Hall," who had just passed through the orthodox curriculum of Medical study, and yet was obliged to confess that he did not know how to write the most elementary prescription for the most elementary disease. He attributed his deficiency to the absence of all systematic instruction on the subject. This absence of instruction is perhaps owing to the subject not falling within the strict domain of any one teacher; but surely the Professors of Materia Medica and of Clinical Medicine might map out the province between them.

The practical consequence of this great defect in our Medical teaching is manifold. Some Practitioners do not know how to combine medicines in a skilful way; others join together what cannot be chemically or therapeutically united; while many more never travel beyond a safe and circumscribed routine, from which, however, their patients do not derive the benefit of the full resources of the healing art. Much sound advice might be given to students on the principles which ought to govern the combination of pharmacopœial preparations. Take, for example, the treatment of a common complaint,—chronic constipation. As far as drugs are concerned, this complaint in an otherwise healthy person may usually be removed by the administration, once or twice a-day, of small doses of sulphate of magnesia and of aloes (especially the compound decoction). Now, it might easily be explained to any second year's student that the therapeutical properties of one of these drugs are, in this instance, assisted and corrected by those of the other.

There are many invaluable formulæ at the end of Druitt's "Surgeon's Vade Mecum," remarkable for their scientific union of drugs possessing different yet similar qualities. Besides procuring signal benefit to his patient, a young Practitioner may often gain immense credit to himself by the timely use of a dexterous pharmaceutical formula. And, considering the great majority of Medical cases over Surgical which occur to most General Practitioners, some attention to this subject would seem to be as well bestowed as on the form and fashion of a splint, or any other Surgical appliance.

Proficiency in the art of prescribing can, of course, be

obtained only by long experience, and by a thorough knowledge of the relative value of medicines. Every thoughtful man feels a pleasure in working out this matter for himself, but he would derive much assistance if, at the outset of his professional career, he could see a few landmarks and finger-posts to guide him through the intricacies of a rather difficult road.

I am, &c.

Bath, September 2. A Dispensary Surgeon.

OBITUARY.

MR. JONES, OF JERSEY.

We deeply regret to have to announce the death of this Surgeon, which took place on Saturday last, from the effects of typhus fever, caught in the discharge of his duties. Some three or four years ago, Mr. Jones was seized with partial paralysis and great prostration of the system, after having sat up for nearly thirty nights in succession, in attendance upon an old friend and patient. From the effects of this attack he never thoroughly recovered, although he benefitted very much by a total abstinence from Professional duties for some time, and by the care and attention bestowed upon him by his friend, the late Dr. Todd. He, however, returned to his practice, and entered upon his duties with undiminished ardour, but with a frame not capable of resisting contagion as it did formerly, and he died at his post, working to the last, as it became the man, and probably as he would have wished.

Perhaps there has been no Surgeon out of the three metropolitan cities who has attracted greater attention, during the last ten years, than Mr. Jones. Up to 1850 his name was not known beyond the little island which was the scene of his Surgical exploits; but about that time he signalised himself by the performance of several remarkably successful cases of excision of joints, especially of the knee, and by his practice and writings he contributed as much as any one to the rapid spread of conservative Surgery. So anxious was Mr. Jones to encourage the operation of excision of the knee-joint instead of amputation, that he was at the trouble and expense of coming over to England with some of the poor patients upon whom he had operated, and a great impression was thus made in favour of this proceeding, about the merits of which there was at this particular time a great deal of warm discussion. In connexion with this subject it is right to mention that, although most undoubtedly the merit of reviving excision of the knee is due to Mr. Fergusson, the subject of this memoir adopted the operation a few weeks after Mr. Fergusson had first performed it, but without being aware of the fact. The success attending the operations of Mr. Jones was remarkable. When the writer of this notice last visited Jersey, Mr. Jones had performed fifteen excisions of the knee, with only one death. He performed on numerous occasions the excisions of the other joints with almost equal success, especially those of the hip and ankle. The most perfect result from the latter operation we have ever seen was in the person of an adult operated upon by Mr. Jones a few years ago.

The well-known success following Mr. Jones's operations has been often attributed to the pure air of Jersey; but those who, like the writer, have had opportunities of watching Mr. Jones's practice, would be able to affirm with truth that the results were more owing to the assiduous care bestowed by the operator in the after-treatment of his cases. The Hospital where most of his cases were operated upon, was not well calculated for such a purpose; the wards were small, the beds were close together, and the ventilation was by no means good. Mr. Jones, however, used to support his patients well after operations, watched symptoms narrowly, and was most careful and gentle in dressing wounds. Hence the reason for the extraordinary success which undoubtedly followed his great surgical operations, and for the reputation which he most deservedly acquired during the last ten years of his life. His practice was considered by some to be bold, even to the verge of rashness, as, for instance, in the exhibition of half-ounce doses of tincture of digitalis for delirium tremens; but the results justified the practice.

His loss will be felt severely in the Island of Jersey, both by poor and rich, amongst whom he practised for a period of thirty-five years; and those who knew him as a friend, will readily admit that it will be difficult to find a man with a more thoroughly genial, honest, and unselfish nature.

The *Jersey Times* says of Mr. Jones that his memory will be cherished as the memory of a kind and humane man,—"A man who always had an encouraging word and a kindly smile for the poorest patient under his care—always a gentleness and a fatherly tenderness for the sick children sprinkled about the wards of the Hospital.

"To record the fact of Mr. Jones' death is a work almost of supererogation; for the sorrowful tidings having spread with a rapidity which marks the universal reputation he had earned, as truly as the unqualified expression of regret which attended the information, marks the deep respect in which he was held.

"The office of Surgeon to the General Hospital becomes vacant by this sad demise, and we only hope that the States may be so fortunate as to find in Mr. Jones' successor a gentleman as talented and as assiduous as he whose loss one and all deeply mourn. And if we have one other hope, it is that the remuneration may be made more commensurate with the arduous and responsible duties of the office."

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, September 5, 1861:—

Angier, George Augustus, Ipswich, Suffolk
Davey, John Edwin
Iliffe Frank, Nuneaton
Lee, Herbert Grove, Thame, Oxon
Murrell, William Henry Julius, Lewes, Sussex

The following gentlemen also on the same day passed their First Examination:—

Beadles, Authur, St. Martin's-lane
Watmough, William, Frederick-street, Gray's-inn-road.

APPOINTMENTS.

Bacon.—George Mackenzie Bacon, M.R.C.S. Eng., L.M., L.S.A. Lond., has been appointed Assistant Medical Officer of the Norfolk Lunatic Asylum, at Thorpe, near Norwich. He is now temporarily filling the office of Chief Medical Officer and Superintendent, having been appointed to do so on the death of Mr. Casson, till the successor of the latter should have been elected and taken office.

Devereux.—Daniel Devereux, M.R.C.S. Eng., L.S.A. Lond., has been appointed Resident Apothecary to the Middlesex Hospital, in the place of Mr. Charles Henry Fowler, resigned.

Donne.—J. M. Donne, M.R.C.S., L.S.A., L.M., has been elected District Medical Officer to the First and Second Districts of St. Marylebone, *vice* Mr. E. A. H. Head, resigned.

Ebsworth.—Alfred Ebsworth, Fellow and M.R.C.S. Eng., L.S.A. Lond., has been elected to succeed Dr. Marsh, M.D. St. Andrew's, M.R.C.S. Eng., L.S.A. Lond., resigned, as Medical Officer for the Trinity District, St. Mary's Newington, Surrey.

Eccles.—Edmund Eccles, M.R.C.S. Eng., L.S.A. Lond., has been elected to succeed his father, the late Edmund Eccles, M.R.C.S. Eng., as Union Medical Officer for the Alston District of the Preston Union, Lancashire, and also as Factory Surgeon to the District of Alston in the same Union.

Edwards.—Edwin Thomas Edwards, of Macclesfield, Cheshire, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer for the Dawlish District in the Newton Abbot Union, Devonshire, *vice* Mr. Cann, resigned.

Fernandez.—Thomas Francis Fernandez, M.D., Fell. (by Examination) and M.R.C.S. Eng., L.S.A. Lond., has been elected Medical Officer for the Parish of Isleham, in the Newmarket Union, Cambridgeshire, in the room of William Abel Rackham, M.R.C.S. Eng., L.S.A. Lond., resigned.

Hill.—Thomas Johnson Hill, M.R.C.S. Eng., L.S.A. Lond., has been re-elected Medical Officer for the Probus District, in the Truro Union, Cornwall.

Hills.—William Charles Hills, Assistant Medical Officer of the Kent County Asylum at Maidstone, M.D. King's Coll. Aberd., M.R.C.S. Eng., L.S.A. Lond., has been appointed Chief Medical Officer and Superintendent of the Norfolk County Lunatic Asylum, at Thorpe, near Norwich, vacant by the death of Mr. Edward Casson, M.R.C.S. Eng.

Hocking.—Joseph Hocking, M.R.C.S. Eng., L.S.A. Lond., has been elected House-Surgeon to the Dorset County Hospital at Dorchester, vacant by the resignation of Mr. Phillips.

Hume.—Henry Hume, M.R.C.S. Eng., L.S.A. Lond., has been appointed House-Surgeon to the South Shields and Westoe Dispensary, in the room of Mr. Charlton, resigned.

Ingram.—Dr. Ingram has been appointed additional Assistant-Physician to the City of London Hospital for Diseases of the Chest, Victoria-park.

Kennard.—Thomas Atherton Kennard, of Highworth, M.R.C.S. Eng., L.S.A. Lond., has been elected to succeed Mr. Charles Smith, as Medical Officer for District No. 1 of the Highworth and Swindon Union, in the counties of Berks and Wilts.

SANDFORD.—Folliott James Sandford, M.R.C.S. Eng., L.S.A. Lond., has been elected Medical Officer to the Union Workhouse, in the Market Drayton Union, Shropshire, *vice* Mr. Warburton, resigned.

THOMAS.—Edward Wynne Thomas, M.B. Univ. Lond., M.R.C.S. Eng., L.S.A. Lond., has been elected Surgeon to the South Staffordshire General Hospital and Wolverhampton Dispensary, in the place of James M'Munn, L.R.C.S. Irel., resigned.

TRUEMAN.—Edgar Beckit Trueman, M.R.C.S. Eng., L.S.A. Lond., has been appointed Resident Surgeon and Apothecary to the Nottingham Dispensary, vacant by the resignation of Francis Wynter Clarke, First M.B. Lond., M.R.C.S. Eng., L.S.A. Lond., appointed Medical Officer to the 5th District in the Abingdon Union, Berks.

WILLIAMS.—Evan Evans Williams, M.R.C.S. Eng., L.M., L.S.A. Lond., has been elected to succeed the late Dr. John Thomas, as Medical Officer of the Llandilo Fawr Union, Carmarthenshire.

DEATHS.

BALDY.—September 6, John Patey Baldy, Esq., of 23, Pembroke-street, Devonport, M.R.C.S. Eng., 1814, Private Teacher of Anatomy, Surgery, and Materia Medica, aged 67 years.

BOX.—August 23, William Henry Box, of East Looe, Cornwall, M.D. Erlangen, M.R.C.S. Eng., L.S.A., Lond., aged 65.

FERGUSON.—September 4, at Belgrave-square, Rathmines, Ireland, O'Neil Ferguson, M.D., Surgeon Royal Navy (seniority, November 23. 1841).

PICKELLS.—September 8, William Pickells, of Sidney-place, Cork, A.B. and M.B. University and Trinity College, Dublin, Senior Physician to the Fever and Cholera Hospital there.

STEWART.—July 21, of cholera, at Agra, East Indies, J. F. Stewart, Surgeon to the Bhurtpore Political Agency.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The Library will re-open on Monday, the 16th inst.

QUACKERY has had another victim in the person of the Abbé Goater, who dwelt peacefully in Mélicourt (Eure). Five weeks ago he was stroking a favourite dog, and was bitten. He resorted to a herbalist, who gave him an "infallible" lotion; a speedy cure being promised. Weeks passed, and at the end of a month, hydrophobic symptoms appeared, and went on till death relieved the worthy Abbé of his sufferings. Had he had the wound properly cauterised without loss of time, the quack might have lost a customer, and the list of fatal cases of hydrophobia might have been one less.

ABORTION IN CALIFORNIA.—The Legislature of California has decreed that the woman upon whom abortion is practised shall be held as guilty as the operator. The design of this law is thus explained by the San Francisco *Medical Press*:—"The design was to prevent wicked female adventurers from attempting to blackmail Medical men by applying to them, even when not pregnant at all, for the ostensible purpose of having an abortion produced, but who, when the doctor would, in order to get rid of them, prescribe some inert substance, would have a prosecution commenced against him for producing a criminal abortion, and cause much trouble, unless he would buy them off in the beginning. Or, what is still worse and entirely unavoidable on the Practitioner's part, they could swear him guilty of producing criminal abortion, when he had not even been applied to at all in the matter. This occurred once in this city; and although the perjury soon became apparent in the case, still the idea of a respectable Medical man being arraigned as a criminal, is not very palatable, even though it ultimately becomes plain to everybody that his prosecution is based upon perjury alone. As the law now is, the Practitioner has only to perform his duty conscientiously to be free from this species of annoyance, while these wicked adventurers, under the assumed connexion of dear husband and wife, will have to conduct themselves cautiously, or otherwise find a quick way to the State's Prison."

VITAL STATISTICS OF LONDON.

Week ending Saturday, September 7, 1861.

BIRTHS.

Births of Boys, 871; Girls, 897; Total, 1768.
Average of 10 corresponding weeks, 1851-60, 1598·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	555	566	1121
Average of the ten years 1851-60	632·0	628·8	1260·8
Average corrected to increased population	..	..	1162
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West'	463,373	..	3	7	3	5	2	20
North ..	618,201	..	3	11	2	6	4	31
Central ..	378,058	..	1	5	1	6	3	12
East	571,129	1	..	7	2	14	6	27
South ..	773,160	..	1	18	3	16	6	57
Total.. ..	2,803,921	1	8	43	11	47	21	147

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·776 in.
Mean temperature	62·4
Highest point of thermometer	81·1
Lowest point of thermometer	49·8
Mean dew-point temperature	54·5
General direction of wind	S.W.
Whole amount of rain in the week	0·11 in.

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Robinson's case of Laceration of the Perineum shall appear on the 28th inst.

Mr. Pope.—The Recantation was published in the *American Medical Times* and other journals.

ERRATUM.—In a review published last week, page 249, an error occurs. It is stated that the daily sick number 998; it should be 1835—the former number only including the infantry. The number of sick from venereal in the whole army is not 80 per thousand, but 38·6.

A LEAD POISONING QUERY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Can any of your readers inform me whether taking snuff in large quantities has been known to produce symptoms of lead poisoning? If so, I shall be glad to have reference to any published cases, as I believe I have a case of this kind under my care just now. I am, &c.

J. J. C.

DR. PETERS AND HOMŒOPATHY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your journal of the 7th inst. you state that Dr. Peters "has publicly renounced Homœopathy." Now, Sir, permit me to say this is not the case; and I think, if you will read over his remarks again carefully, you will see that he has only "renounced" infinitesimal doses, but not Homœopathy.

Many genuine Homœopaths, as well as Dr. Peters, prescribe medicines in palpable doses; but this does not in the least affect Homœopathy, or make them any the less believers in its doctrine.

Dr. Peters himself says that "Hahnemann performed all his first cures with tangible doses."

Believing you do not willingly wish to state what is not correct in your journal, I have sent you this, hoping you will have the justice to insert it.

Homœopathy is misrepresented quite enough without making Dr. Peters' "renouncing" of infinitesimal doses imply that "he has renounced Homœopathy." I am, &c.

Cheltenham, September 9. H. Hastings, M.D.

[We print this, but it is quite clear from Dr. Peters's statement that he has renounced Homœopathy—not that we think his recantation worth very much.—Ed.]

Scarlatina Infection.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Miss M. A. K., whilst in a state of perfect health, on August 3, 1861, received a letter by post, from a friend in Dublin, conveying the intelligence that one of his children had just died from an attack of scarlatina in a very malignant form. The young lady was so much affected by the news that she cried bitterly and incessantly, and carried the letter about with her, so as to be able to read it frequently. Next day she was very ill; but her family thought she was suffering only from the effects of grief, and were in no way alarmed till, towards evening, they noticed an eruption on her face.

I was requested to see her early in the morning, and I found her completely covered with scarlatina eruption. She had the characteristic sore-throat, and went through every stage of the disease, even to the extensive desquamation of the cuticle. Her case was so severe that her recovery was extremely doubtful for two days.

This young lady was not out of Coleraine, nor was there a single case of scarlatina in the district, for months, nor has there been one since. How, then, can we account for her taking the disease? Was the infection conveyed in the letter from Dublin to Coleraine, or was the case altogether isolated and accidental? There is no epidemic in the district. I look upon this case as sufficiently important to be placed upon record. The facts are all indisputable. I am, &c.

Coleraine, Ireland, September 9. James C. L. Carson, M.D.

Preliminary Examination.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg to call your attention to the enclosed advertisement, which will, I fear, cause some confusion, or, rather, misconception, as to what will be required of Students commencing their Medical studies this ensuing Session:—

"Royal College of Physicians of London.—The next Preliminary Examination in the subjects of General Education will take place on the 24th and 25th of September. In the Examination in Latin, selections will be made from 'Cicero de Senectute,' and the 'Fourth Book of the Odes of Horace.' Candidates are required to give fourteen days' notice to the Registrar of the College. N.B.—The General Council of Medical Education and Registration have recommended that no Student beginning Professional study after September, 1861, be registered who has not passed an Arts' Examination.—H. A. Pitman, Registrar.—Pall Mall East, September, 1861."

It is quite true that the General Council have made a recommendation to the effect stated,—*vide* their Report, paragraph No. 10. But Students entering this year will, notwithstanding, be able to register at the College of Surgeons as usual. They need only pass the "Preliminary Examination," alluded to in the advertisement, some time or other before they are admitted to the Primary Professional Examinations.

Students who do not enter before October, 1862,—that is to say, October twelvemonth—will not be able to register until they have passed the Preliminary Examination in General Education.

London, September 9. I am, &c. A Lecturer.

Who are Physicians?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the *Medical Times and Gazette* of August 17, page 178, there is a letter headed "Who are Physicians?" in which letter your correspondent has mooted two questions—he has treated of them as one—which appears to me to be entirely separate and distinct from one another. The questions are these:—

1st. Is it lawful for a graduate of a Scotch, an Irish, or a foreign University to designate himself a Physician?

2nd. Is it lawful for a graduate of a Scotch, an Irish, or a foreign University to practise physic?

To the first question I will not presume to offer a reply—it may have to be answered, as "M.D. and F.R.C.P." has suggested, "by severe high judicial determination and authoritative dictum"—but will quote the "ruling" of the Chief Baron of the Exchequer in the case of Ellis *v.* Kelly, which was argued in the Court of Exchequer on November 14, 1860, and reported in the *Medical Times and Gazette* on the 24th of the same month. In that case the Chief Baron said, "If a man is registered he may call himself what he pleases;" and Barons Bramwell, Channell, and Wilde concurred in the dictum of the Chief Baron.

The second question is answered in the affirmative by "The Medical Act," as, with your permission, I will proceed to show It is enacted by the 15th section of the Act, that "every person now possessed, and (subject to the provisions hereinafter contained) every person hereafter becoming possessed, of any one or more of the qualifications described in the schedule (A) to this act, shall," on complying with certain requirements contained in the section, "be entitled to be registered: schedule A is merely a list of those qualifications which entitle the holders of them to be registered; and in that list—section 10—are "Doctor, or Bachelor, or Licentiate of Medicine . . . of any University of the United Kingdom;" and conditionally—section 11—"Doctor of Medicine of any Foreign or Colonial University or College, practising as a Physician in the United Kingdom before the 1st day of October, 1858." By the 31st section of this Act, "Every person registered under this Act shall be entitled according to his qualification or qualifications to practise Medicine or Surgery, or Medicine and Surgery, as the case may be, in any part of her Majesty's dominions."

From the above extracts from the Medical Act, it appears to me to be clearly proved that it is lawful for registered graduates of Scotch, Irish, and Foreign and Colonial Universities to practise Medicine in any part of the Kingdom. I am, &c.

August 28. M.D., but not F.R.C.P.

The Size of Scottish Brains.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Your correspondent, "F.R.S.," does, it seems, seriously endorse the notion that the human brain is larger in the East than in the West of Scotland.

This is, at any rate, a brainful, not a brainless question. If I had a fondness for the wonderful I should gladly adopt the Eastern view of it, since it is really the drollest idea ever yet placed in the category of human knowledge. Here you have a people of the same race, and living under the same government, alike in modes of life, language, history, and religion, of whom it is stated that a line of longitude, separating the East from the West, separates the large brains from the small. The point of division is about twenty-two miles from Glasgow, on the road to Edinburgh. It seems only right that the discoverer of this great fact, aided by its seconder and promoter, "F.R.S.," should start a subscription for the erection along this boundary-line of a succession of signal-posts pointing due East and West, so that every intending "paterfamilias" may decide where his child should be born if he wishes him to have a large brain. This variety of public works would be considered the eighth wonder of the world, and might be appropriately designated by three B's, being the "Big Brain Boundary."

It must be admitted that in the earliest periods of Scottish history, the East being the only outlet of commerce, and its cities the chief points of communication with the rest of the world (America not being then discovered), the East of Scotland was in advance of the rest of the country. The Court was there, the aristocracy was there, and the Universities and the Courts of Law. The West of Scotland was at that time a comparatively neglected province. In all ages the highest class of minds are best cultivated where the highest motives are given, and the best means furnished by wealth, rank, and by other elements resulting from more numerous points of contact with the rest of the world. Even at this early era there were distinguished men in the West, and there were no doubt many highly-developed brains in the West of Scotland utterly uneducated. But as wealth has grown up in the West of Scotland, men have presented themselves by no means inferior to any of the great names of History. The East and the West of Scotland have both produced great men, but many would really say that during the last century the West has had the advantage. If the East produced Lord Campbell, the West gave us Lord Stair. We rather think that Robert Burns did not come out of the East, nor Robert Pollock, nor Thomas Campbell, nor Allan Ramsay. The West has a few names in Medicine, of whom it may be proud, John and William Hunter, William Cullen, to say nothing of McKenzie, and many others not yet among the dead. Professor Wilson did not come from the East, nor Joanna Baillie, nor Tobias Smollett, nor Boswell, nor Robert Tannahill, nor John Sterling. Although it is better not to bring in living names, two of these at any rate are prominent enough to be cited without offence, Sir Colin Campbell and Dr. Livingstone.

Among the names of the honoured dead we forget to name Wallace, Bruce, and very many others from the West. Wilson, the Ornithologist, was a native of Paisley. But surely Burns, Watt, John Hunter, Cullen, Thomas Campbell, and Prof. Wilson have given us presumptive proof of having had brains as large as those any half dozen of the wise men of the East. I am, &c. D. M.

COMMUNICATIONS have been received from:—

Mr. W. Adams; Dr. Arnott; Mr. Solomon; Dr. Carter, Leamington; Mr. H. Smith; Dr. Remak, Berlin; Mr. Soelberg Wells; Dr. Chevalier, Durham; Mr. Hughes, Chester; Dr. Houseman; Mr. Turner, Clifton; Dr. Deane; Mr. Pope; Mr. Spender; Registrar-General; Dr. Scholefield; Mr. C. Hunter; Mr. Harding; Mr. Windsor; Mr. Buck; Registrar-General, Edinburgh; Mr. Donne; Mr. Alexander; M. Amarante, Mentone; The Registrars, Deans, &c. of the Universities, Colleges, and Schools; and our Correspondents in Dublin, Manchester, France, Vienna, Munich, Paris, Florence, &c.

APPOINTMENTS FOR THE WEEK.

September 14. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

16. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

17. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

18. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

19. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

20. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

Metropolitan Free Hospital.—The following Operations will be performed on Monday next, at two o'clock precisely:—

By Mr. Childs—Lithotomy; Division of Tendo-Achillis.

CHLORODYNE.—(Trade Mark.)—Caution to Medical Men about spurious imitations, and letter from a medical man.

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(Signed) "JAS. ATKIN, M.D., *Med. Officer Fever Hospital, Belfast.*"

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F. WALTERS having originally invented these Urinals, begs to warn the Profession of the many bad and useless imitations which are now sold, and he would advise them, before purchasing, to look that they are stamped with his name; as, unless that be the case, he cannot guarantee them.

These conveniences are made for those who require them only occasionally, during a long journey, as well as for those invalids who use them always. Mr. Walters has much improved them by making them of *Ætherised India-Rubber*, which adds very greatly to the strength of the India-Rubber, at the same time that it prevents its sticking together; by this means he is enabled to make them less stiff and harsh than hitherto, and yet to retain all the advantages of that stiffness. There is a patent valve, which prevents the return of the fluid; and they may be worn either sitting, walking, or lying, without the slightest inconvenience, and without being perceived by any one.

Walters' Conveniences For Ladies will be found particularly useful during pregnancy. They are perfectly soft and flexible, and may be worn with perfect comfort.

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MARIENBAD, and other MINERAL WATERS.—ROYAL GERMAN SPA, BRIGHTON.—Under her Majesty's especial Patronage. STRUVE'S PUMP-ROOM is now open for the Thirty-seventh Season. The Bottled Waters are sold at the Pump-room, Brighton, and by GEORGE WAUGH and Co. Pharmaceutical Chemists to the Queen, 177, Regent-street, London, W., and by other respectable houses in London and the provincial towns, where a prospectus with the highest Medical Testimonials may be obtained gratis. CAUTION.—Owing to the use of Struve's bottles by other parties, please to observe that Struve's name is on the label, and red-ink stamp affixed to every bottle of Struve's manufacture.

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attention of the Medical Profession to his EXTRACT of INDIAN HEMP, prepared expressly for him at Calcutta, its peculiar sedative properties being so beneficial where opiates are inadmissible. Also to his MEDICINAL EXTRACTS, prepared from the fresh plants (Hyoscyamus Niger, Conium Maculatum, Atropo, Belladonna, Cotyledon Umbilicus, etc.) Also to his Liq. Taraxici, Liq. Galli Aparinis (a valuable alterative), Liq. Paricteriæ (diuretic), and Liq. Belœ (prepared from the Ægle Marmelos, or Indian Bael), for dysentery and diarrhœa. W. T. has a large supply of INDIAN BAEL on hand. 2, Edwards-street, Portman-square.

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TO CORRESPONDENTS.

We beg to return our best thanks to the Registrars and Secretaries of the various Universities, Colleges and Schools, for their prompt replies to our Circular, and for the trouble they have taken in supplying the latest Regulations of the Institutions with which they are connected.

In order to confine the whole of this week's Number to information specially important to Students, we are compelled to defer answers to several Correspondents until next week.

Medical Times and Gazette.

SATURDAY, SEPTEMBER 21.

TO STUDENTS.

In order to afford the Student the whole of the official information he needs in order to obtain any English, Irish, or Scottish qualification, we have this year omitted our usual Address and the tables given in previous years—only directing the especial attention of those about to enter the Profession to the Regulations as to General Education and Preliminary Examination, offering them our most hearty good wishes for their future success, and recommending them to endeavour to profit by the advice they will receive from the gentlemen who open the different Schools by Introductory Addresses in the usual form.

RECOMMENDATIONS OF THE MEDICAL COUNCIL.

The following Recommendations have been made by the General Medical Council to all the Licensing Bodies, and it may be seen that nearly all these Bodies have acceded to the desire of the Council:—

RECOMMENDATIONS OF THE GENERAL MEDICAL COUNCIL, IN REFERENCE TO GENERAL AND PROFESSIONAL EDUCATION.

I.—General Education and Examination.

The Medical Council are of opinion that it is desirable—

1. That all students pass an examination in General Education before they commence their Professional studies.

2. That the time of commencing Professional studies shall be understood to be the time of commencing studies at a Medical School, and that no Qualifying Body be held to have complied with the recommendation of the Council which shall allow the Examination in General Education to be passed after the commencement of Professional study.

3. That, as far as may be practicable, testimonials of proficiency granted by the National Educational Bodies, according to the following list, be accepted, with such modifications as the Medical Council may from time to time think proper to make:—A Degree in Arts of any University of the United Kingdom, or of the Colonies, or of such other Universities as may be specially recognised from time to time by the Medical Council; Oxford Responsions or Moderations; Cambridge Previous Examinations; Matriculation Examination of the University of London; Oxford Middle Class Examinations, Senior and Junior (a); Cambridge Middle Class Examinations, Senior and Junior (a); Durham Middle Class Examinations, Senior and Junior (a); Durham Examinations for Students in Arts, in their second and first years; Durham Registration Examination for Medical Students; Dublin University Entrance Examination; Queen's University, Ireland, two years' Arts' Course for the Diploma of Licentiate in Arts; Preliminary Examinations at the end of A.B. course; Middle Class Examinations; Matriculation Examinations; First Class Certificate of the College of Preceptors.

(a) After January 1, 1863, all Junior Middle Class Examinations will be excluded from the list.

4. That the Examination in General Education be eventually left entirely to the Examining Boards of the National Educational Bodies recognised by the Medical Council.

5. That no Certificate of Proficiency in General Education, which does not affirm the proficiency of the candidate in Latin, be decmed a sufficient proof of Preliminary Education previous to the commencement of Professional studies.

6. That students who cannot produce any of the testimonials referred to in the third resolution, be required to pass an Examination in Arts, established by any of the bodies named in Schedule (A) of the Medical Act, and approved by the General Council, provided that such examination be in every case conducted by a special Board of Examiners in Arts.

7. That without professing to lay down any complete scheme of General Education for persons intending to become Members of the Medical Profession, the Committee recommend that the scheme of Examination in Arts of the Licensing Bodies be as nearly as practicable, similar to that of any of the National Educational Bodies above specified.

8. That after October 1, 1861, all Medical Students be required to be registered.

9. That the lists of Students registered be closed within fifteen days after the commencement of each session or term.

10. That no student beginning Professional study after September, 1861, be registered, who has not passed an Arts' Examination, in conformity with Resolutions 3 or 6.

11. That the several Bodies in Schedule (A) of the Medical Act, either jointly or severally, open a Register for Students commencing their studies in Medicine, in the form annexed:—

REGISTER OF MEDICAL STUDENTS.

No.	Name.	Date of Birth.	Place of Birth.	Present Residence.	Date of Registration.	Place of Study.	Registering Body.	What Examination in Arts, & its Date.
1	A. B	..	..	London	..	University College, London.	University of London.	Matriculation Examination of University of London, May, 1861.
2	C. D.	..	..	Birmingham	.	Birmingham General Hospital.	Royal College of Surgeons of England.	Oxford Middle Class Examination, Aug. 1861.

12. That after January, 1863, all Junior Middle Class Examinations be excluded from the list.

13. That the said Register be opened on the first day of each session or term, and remain open for fifteen days; and that within seven days after its close the officer in charge transmit a duly authenticated copy thereof to the Registrar of the Branch Council of that division of the United Kingdom to which the body or bodies belong.

14. That the Registrar of the Branch Council lay the copy of the said Register before the Branch Council, in order that the Branch Council may take whatever steps may seem necessary to secure its accuracy; and that it be thereafter transmitted, with any remarks by the Branch Council thereon, to the Executive Committee.

15. That the Licensing Bodies shall have power to admit exceptions as to the time of Registration, if satisfactory to them, and transmit lists of such exceptions to the Branch Council of the part of the United Kingdom in which such exceptions shall have been granted, with the grounds stated.

16. That the various Educational and Licensing Bodies be requested to transmit to the Registrar of the General Council returns, embodying any alterations which they may from time to time introduce into their courses of general study and examinations, which qualify for the registration of Medical Students; and that a copy of such returns be sent by the Registrar, as soon as convenient, to each member of the General Council.

II.—Professional Education.

17. That the age of twenty-one be the earliest age at which any Professional licence shall be obtained.

18. That four years of Professional study be required after the examination in General Education.

III.—Professional Examinations.

19. That the Professional Examinations be divided into at

least two distinct parts; that the first be not undergone until after the termination of two years of study; and the final examination not until after the termination of four years of study.

20. That the first Professional Examination be conducted party in writing and partly *vivâ voce;* and that such parts as admit of it, be made as practical and demonstrative as possible.

21. That the second examination be conducted partly in writing, partly *vivâ voce,* and practically, so far as may be convenient and attainable.

22. That the Professional Examinations be held by the several Licensing Bodies (except in special cases) at stated periods, to be publicly notified.

23. That returns from the Licensing Bodies under Schedule (A) be made annually, on the 1st of January, to the General Medical Council, stating the number and names of the candidates who have passed their respective final examinations, and the number of those who have been rejected.

24. That it be recommended to all the Examining Boards that they should require from every candidate for examination before them a statement, signed by himself, whether he has, or has not, been rejected within three months by any of the Examining Boards included in Schedule (A) of the Medical Act.

25. That it is not desirable that any University of the United Kingdom should confer any degree in Medicine or Surgery, whether that of Bachelor, Doctor, or Master, upon candidates who have not graduated in Arts, or passed all the examinations required for the Bachelorship in Arts, or the examinations equivalent to those required for a degree in Arts.

RULES AND REGULATIONS

OF THE

EXAMINING MEDICAL BODIES

IN

ENGLAND.

SESSION 1861—1862.

UNIVERSITY OF OXFORD.

OFFICERS, 1861.

Chancellor.—The Earl of Derby, D.C.L.

High Steward.—The Earl of Carnarvon, D.C.L.

Vice-Chancellor.—Francis Jeune, D.C.L., Master of Pembroke.

Registrar.—Edward Wetherell Rowden, D.C.L., late Fellow of New College.

PROFESSORS.

Regius Professor of Medicine.—H. W. Acland, M.D., Ch. Ch.

Sherardian Professor of Botany.—C. G. B. Daubeny, M.D., Fellow of Magdalen.

Lichfield's Professor of Clinical Medicine.—H. W. Acland, M.D.

Linacre Professor of Physiology and Anatomy.—George Rolleston, M.D., Pembroke.

Aldrichian Professor of Chemistry.—Benjamin C. Brodie, M.A., Balliol.

TERMS REQUIRED FOR DEGREES IN ARTS.

By those who have not taken any degree in Arts, Michaelmas and Hilary Terms are each kept by six weeks' residence, and Easter and Trinity Terms by three weeks each.

Twelve terms are required for the degree of Bachelor of Arts, from all except the sons and eldest sons of the eldest sons of Peers, etc.

Bachelors of Arts proceed to their M.A. degree in the twenty-seventh term (in the privileged cases twenty-third) from their Matriculation.

EXAMINATIONS REQUIRED FOR DEGREES IN ARTS.

All Undergraduates must pass three public Examinations before they can proceed to the B.A. degree.

I. "Responsions," which may be passed any time up to the Sixth Term.

II. "Moderations," which may be passed as early as the Seventh and as late as the Tenth Term.

III. The "Public Examination" which must be passed in two Schools, but not necessarily in the same Term, as early as the Twelfth, and (for Honours) as late as the Eighteenth Term. These schools are (*a*), that of Literæ Humaniores to be passed first and *by all;* (*b*) either Mathematics, or Natural Science, or Law and Modern History, whichever the candidate chooses.

TERMS REQUIRED FOR DEGREES IN MEDICINE.

For the degree of Bachelor in Medicine, three years' or twelve terms' residence are necessary, as in the case of candidates for degrees in Arts, with whom they must undergo a public examination, after which sixteen terms, or four years of Professional study, are necessary.

A B.M. enjoys the same privilege with the B.C.L. in reference to his M.A. degree.

For a Doctor's degree, three whole years after the Bachelor's are required.

EXAMINATIONS REQUIRED FOR DEGREES IN MEDICINE.

For the degree of Bachelor of Medicine all students (besides undergoing the same examination appointed for Bachelors of Arts) must pass two Medical examinations; the first (in Anatomy, Physiology, Chemistry, Botany, and Mechanical Philosophy) (a) after the expiration of *two* years; the second (in the Theory and Practice of Medicine, Materia Medica and Therapeutics, Pathology, Hygiene, etc.) after the expiration of *four* years, from the date of having passed the B.A. examination in one school.

For a Doctor's degree in Medicine a dissertation upon some subject, to be approved by the Regius Professor, is to be publicly recited in the schools, and a copy of it afterwards delivered to the Professor.

UNIVERSITY FEES.

1. At Matriculation.—For a Servitor, or Bible-Clerk, 10s. For a nobleman, or the eldest son of a Peer, £8. For Privileged persons (according to Stat. tit. vi. 5, § 1), not claiming immunity, £5. For all others, £2 8s. And for non-Academicians, £1.

2. At Graduation.—For the Degree of B.A., S. Med., or S.C.L., £7 10s.; for B. Med., £6 10s. For the Degree of M.A., £12. For the Degree of M.A., if he has been admitted to his B.C.L. Degree before September 29, 1855, £4 5s.; if after that time, £7. For M.A., if B. Med., £7. For Bachelors in Divinity, £14; in Law, £6. 10s. For Doctor in any of the superior faculties, £40. For Bachelor of Music, £5. For Doctor in Music, £10. For a Degree by Decree of Convocation, or granted to any in their absence, besides the usual fees, £5. For Degrees by accumulation, beyond the usual fees, £5. If any M.A. or Doctor, after having quitted the University, shall wish to return, he shall reside twenty-one days in any one Term, and pay a fee of £10, unless he would prefer to pay up the fees due from the time of his leaving the University. If he shall not reside, £20.

3. Incorporation Fees.—B.A., £8; M.A., £15; Bachelor in any of the superior faculties, £15; Doctor in any superior faculty, £40; B. Mus., £5; D. Mus., £10. For a Diploma, beyond the usual fees, £10 10s.

4. Fees *ad eundem*, £1. Besides the above, every member of the University pays £1 6s. annually, in four quarterly payments, as University dues. In lieu, however, of this payment, all members having graduated, may at their option compound for all such dues on the following scale, viz.:—If he have not exceeded his 25th year, £22 15s.; 30th, £21 15s.; 35th, £20 12s. 6d.; 40th, £19 8s. 6d.; 45th, £18.; 50th, £16 7s. 6d.; 55th, £14 15s.; 60th, £13 1s. 6d.; 70th, £9 6s. 6d.

5. Fees at Examination.—All Undergraduates are called upon to pay fees on entering their names for their respective Examinations: viz. for Responsions, 20s.; the First Public Examination, 21s.; the Final Examination, 21s.; for admission into any second school, 10s.; for Examination in Civil Law, 20s.; and in Medicine, 20s. An additional fee of £10 for the Examinations in Medicine is paid to Bachelors in that Faculty before admission to that degree.

(a) Candidates who have already obtained a place in the first or second class in the Natural Science School, are excused these three last subjects.

UNIVERSITY OF CAMBRIDGE.

OFFICERS, 1861.

Chancellor.—His Royal Highness Prince Albert, LL.D., Trinity.

High Steward.—Lord Lyndhurst, LL.D., Trinity.

Vice-Chancellor.—Hon. Latimer Neville, M.A., Magdalene College.

Registrar.—Joseph Romilly, M.A., Trinity.

PROFESSORS.

Regius of Physic.—Henry J. Hayles Bond, Corpus.

Chemistry.—J. Cumming, M.A., Trinity.

Anatomy.—W. Clark, M.D., Trinity.

Botany.—C. C. Babington, M.A., F.R.S., F.L.S., St. Johns.

Downing Professor of Medicine.—W. W. Fisher, M.D., Down.

Linacre Lecturer on Physic.—G. E. Paget, M.D.

PROCEEDINGS IN PHYSIC.

Attendance at the Lectures and Hospital is recognised by the Universities of Cambridge and London, and by the College of Surgeons and the Society of Apothecaries, for one year.

The Council think it necessary to remark that as, by the provisions of the Medical Act (21 and 22 Vict. c. 90), Bachelors of Medicine will hereafter have the right of registration as qualified to practise Medicine, and it will no longer be necessary for such persons to obtain a licence to practise, it has not been thought necessary to prescribe any course of study or examinations for the licence to practise, but it is proposed to alter the course of study and examinations for the Degree of Bachelor of Medicine so as to insure in all who take it the possession of the requisite amount of knowledge.

1. The following Regulations were approved by the Senate, February 17, 1859 :—

BACHELOR OF MEDICINE.

2. Time to be spent in Medical study.—That five years of Medical study be required of Candidates for the Degree of Bachelor of Medicine, with the exception of Students who have graduated as Bachelors of Arts, in whose case four years of Medical study shall be deemed sufficient.

3. That of the time required to be spent in Medical study six terms be so spent in the University, commencing not earlier than after the expiration of the first three terms of residence, provided that four terms so spent shall suffice in the case of any B.A. who shall have taken an honour in the mathematical, classical, natural sciences, or moral sciences, tripos.

4. Examinations.—That there be two examinations for the Degree of Bachelor of Medicine ; and that the First Examination may be passed by the Student after the completion of three years of Medical study, of which the portion required in his case has been so spent in the University, and the second after the completion of his course of Medical study.

5. Subjects and Course of Study previous to the First Examination.—That the Student before admission to the first Examination be required to produce certificates of diligent attendance on one course at least of lectures on each of the following subjects: Chemistry, including manipulations ; Botany, Elements of Comparative Anatomy, Human Anatomy, and Physiology, Pathology, Materia Medica and Pharmacy. And that he also produce a certificate of having practised dissection during one season at least. The certificates must show that the Lectures on Pathology were attended subsequently to those on Chemistry, and Human Anatomy, and Physiology, and the Lectures on Materia Medica and Pharmacy subsequently to those on Chemistry and Botany.

6. That, as evidence of Medical study in the University, every Student be required to produce certificates of diligent attendance in each term on courses of Lectures on some two of the following subjects, viz. :—Chemistry, Botany, Human Anatomy and Physiology, Comparative Anatomy, Materia Medica and Pharmacy, Pathology. Or of diligent attendance in each term on a course of Lectures on some one of those subjects, and also on the Medical Practice of Addenbrooke's Hospital. Certificates of Lectures on any of the above subjects to be deemed satisfactory if the Lectures be delivered either by a Professor of the University, or by some graduate of the University approved by the Senate ; provided that the course in each case, consist of not fewer Lectures than shall have been determined on by the Board of Medical Studies.

7. Subjects of the First Examination.—That the subjects of the First Examination be Chemistry, Botany, Elements of Comparative Anatomy, Human Anatomy and Physiology, Materia Medica and Pharmacy, Pathology, Celsus—the Aphorisms and Epidemics of Hippocrates—Aretæus on the Causes and Signs of Disease—portions of these authors having been selected for examination by the Board of Medical Studies in the year preceding that of the Examination.

8. Examiners for the First Examination.—That the Examiners for the First Examination be as follows :—In Chemistry, Botany, and Comparative Anatomy, the Professors of Chemistry, Botany, and Anatomy respectively, with one additional Examiner for each Professor to be appointed by grace of the Senate. In the remaining subjects of Examination, the Regius Professor of Physic, the Professor of Anatomy, a Doctor of Medicine, being a member of the Senate, nominated annually by the Board of Medical Studies, and elected by the Senate.

9. Additional Subjects of Study previous to the Second Examination.—That before admission to the Second Examination, the Student be required to produce certificates of having attended one coure at least of Lectures on each of the following subjects :—Clinical Medicine, Clinical Surgery, Medical Jurisprudence, Obstetrical Medicine. Subjects of the Second Examination.—That the subjects of the Second Examination be Pathology and the Practice of Physic, Clinical Medicine, Medical Jurisprudence, the Medical Treatment of Surgical and Obstetrical Diseases.

10. That the Examiners for the Second Examination be the Regius Professor of Physic, the Downing Professor of Medicine, a Doctor of Medicine, being a Member of the Senate, nominated annually by the Board of Medical Studies, and elected by the Senate.

Time of the Examinations.—That the First and Second Examinations for the Degree of Bachelor of Medicine take place each twice annually, first in the week immediately succeeding that in which the division of the Michaelmas Term falls ; secondly, in the week immediately succeeding that in which the division of Easter Term falls.

Mode of Conducting the Examinations.—That the Examinations be conducted principally by written questions, to which the persons examined be required to give answers in writing.

Hospital Practice.—That the Candidate for the Degree of Bachelor of Medicine be required to produce certificates of having attended Hospital practice during three years.

11. Public Exercise in the Schools.—That the act required to be kept by the candidate for the Degree of Bachelor of Medicine be not kept until after he has passed his Examination for that degre.

Time of Admission to the Degree of Bachelor of Medicine. —That the Student of Medicine, whether B.A. or not, may be admitted to the Degree of Bachelor of Medicine in the eleventh term after the completion of his first term of residence.

Inauguration.—1. That the inauguration of Bachelors of Medicine and perfecting of their Degree in every year be on the day of the *Magna Comitia*. 2. That at the inauguration the names be arranged in order of seniority as follows :— (a) Persons who have been Bachelors of Arts, arranged alphabetically. (b) Other Bachelors designate of Medicine, arranged alphabetically.

DOCTOR IN MEDICINE.

12. Time to be spent in Medical Study.—That all persons proceeding to the Degree of Doctor of Medicine be required to produce certificates of having been engaged in Medical study during five years.

13. Examinations and Hospital Practice.—That Masters of Arts, proceeding to the Degree of Doctor of Medicine, be required to produce the same certificates of attendance on lectures and of attendance on Hospital Practice, and pass the same Examinations as are required for the Degree of Bachelor of Medicine.

14. Exemptions in favour of those Persons who have obtained Honours in the Natural Sciences Tripos.—That, in the case of every person who has obtained honours in the Natural Sciences Tripos, and has passed with distinction or to the satisfaction of the Examiners for that Tripos the Examination

in Botany, Chemistry, or Comparative Anatomy, the Examiners, if required, shall give to such person a certificate, stating that he has passed the Examination in such subjects; and that candidates for the Degree of Bachelor of Medicine, or of Doctor of Medicine, possessing such certificates, shall not be required to be examined again in those subjects to which the certificates relate.

15. Certificates.—That all certificates required for the degree of Bachelor of Medicine and for the degree of Doctor of Medicine be delivered to the Regius Professor of Physic before admission to examination for those degrees.

16. Medical Study out of the University.—Medical study out of the University shall in all cases be understood to mean study at some well-known School of Medicine, which has been recognised by the Board of Medical Studies. It shall be the duty of the Board to define, from time to time, what shall be sufficient evidence of such Medical study.

The following Table of Average Expense, regularly incurred by the Student, is calculated for one of the Colleges. The difference is not much at any other College:—

Annual.	£	s.	d.
Tuition	10	0	0
Rooms, Rent	10	0	0
Attendance, Assessed Taxes, etc. ..	6	5	0
Coals	3	10	0
College Payments	5	7	4
Cost of Living.			
Breakfast, Dinner, and Tea, at 16s. 6d. a-week for twenty-five weeks, making the average three terms' residence in the year	20	12	6
Laundress	5	8	0
	£61	2	10

Rent of Rooms varies in the several Colleges from £4 to £30; price of lodgings, 8s. to 28s. per week; the most frequent payment is 14s. or 16s.; and half-price is paid in vacations. Entertainment in rooms, attendance of a gyp, orders in the hall are extra or optional. Private tuition is for the most part £14 or £7 a term.

All Students of Medicine must be registered by the Regius Professor of Physic not later than fifteen days after the commencement of the term.

Students beginning Professional Study after September, 1861, must before registration have passed the Previous Examination or some one of the Examinations in Arts recognized by the General Medical Council.

The General Medical Council have expressed their opinion that it is not desirable that any degree in Medicine or Surgery should be conferred on candidates "who have not graduated in Arts, or passed all the examinations for the Bachelorship in Arts, or the examinations equivalent to those required for a degree in Arts."

N.B. Four years at least of professional study being required for any degree in Medicine or Surgery, it is expected that Students will commence their attendance on the Medical courses at the beginning of the Term.

THE LONDON UNIVERSITY.

Visitor.—Her Majesty the Queen.

Chancellor.—The Right Honourable the Earl Granville, K.G., F.R.S.

Vice-Chancellor.—Sir John George Shaw Lefevre, K.C.B., D.C.L., F.R.S.

Registrar.—William Benjamin Carpenter, M.D., F.R.S.

Clerk to the Senate.—Henry Moore.

EXAMINERS.

Medicine.—William Jenner, M.D.; and Alexander Tweedie, M.D., F.R.S.

Surgery.—T. B. Curling, F.R.S.; and W. Fergusson, F.R.S.

Anatomy and Physiology.—Peter Redfern, M.D.; and William Sharpey, M.D., F.R.S.

Physiology and Comparative Anatomy.—George Busk, F.R.S.; and Thomas H. Huxley, F.R.S.

Midwifery.—W. Tyler Smith, M.D.; and Charles West, M.D.

Chemistry.—Alex. Wm. Williamson, Ph.D., F.R.S.; and Wm. Allen Miller, M.D., F.R.S.

Botany.—Joseph D. Hooker, M.D.; and John Lindley, Ph.D., F.R.S.

Materia Medica and Pharmacy.—Alfred Baring Garrod, M.D., F.R.S.; and George Owen Rees, M.D., F.R.S.

BACHELOR OF MEDICINE.

Candidates for the Degree of Bachelor of Medicine shall be required—

1. To have passed the Matriculation Examination of this University, or to have taken a Degree in Arts in one of the Universities of the United Kingdom.

2. To have been engaged in their professional studies during four years subsequently to Matriculation or Graduation in Arts, at one or more of the Medical Institutions or Schools recognised by this University; one year, at least, of the four, to have been spent in one or more of the recognised Institutions or Schools of the United Kingdom.

3. To pass the Preliminary Scientific Examination (a), and two Examinations in Medicine.

PRELIMINARY SCIENTIFIC EXAMINATION.

The Preliminary Scientific Examination shall take place once in each year, and shall commence on the third Monday in July.

No Candidate shall be admitted to this Examination until he shall have completed his seventeenth year, and shall have either passed the Matriculation Examination or shall have taken a Degree in Arts in one of the Universities of the United Kingdom; nor unless he have given to the Registrar fourteen days' notice of his intention to present himself.

The fee for this Examination shall be £5. No Candidate shall be admitted to the examination unless he have previously paid this fee to the Registrar. If a Candidate fail to pass the Examination, the fee shall not be returned to him, but he shall be afterwards admissible to the Preliminary Scientific Examination without the payment of any additional fee, provided that he give notice to the Registrar at least fourteen days before the commencement of the Examination.

Candidates shall be examined in the following subjects:—Statics, dynamics, hydrostatics, hydraulics, pneumatics, optics, heat, electricity, magnetism, chemistry (inorganic and organic), botany, vegetable physiology, and zoology.

Candidates shall not be approved by the Examiners unless they show a competent knowledge in all the subjects of Examination.

On Monday morning at nine o'clock in the following week, the Examiners shall publish the names of such Candidates as have passed. The names shall be arranged in two divisions, each in alphabetical order. And a pass certificate, signed by the Registrar, shall be delivered to each candidate who may apply for it.

EXAMINATION FOR HONOURS.

Any Candidate who has passed the Preliminary Scientific Examination may be examined for Honours in (1) Chemistry and Natural Philosophy, (2) Biology. Candidates for Honours in Chemistry and Natural Philosophy shall be examined in any of the following subjects, at the option of the Examiners:—Elementary Substances and their Combinations; Electro-Chemistry; Chemical Action; Radiant Heat; Static and Dynamic Electricity; and Magnetism. This Examination shall take place on Monday, Tuesday, and Wednesday, in the second week after the Pass Examination; in the morning from ten to one, and in the afternoon from three to six. In the course of the following week the Examiners shall publish, in the order of proficiency, a list of the Candidates who acquit themselves to their satisfaction. Candidates shall be bracketed together if the Examiners are of opinion that there is no clear difference between them. In determining the relative position of Candidates, the Examiners shall have regard to the proficiency in the corresponding subjects evinced by the Candidates at the Pass Examination. Candidates for Honours in Biology shall be examined in any of the following subjects, at the option of the Examiners:—Vegetable Histology, Vegetable Morphology, Vegetable Physiology (including Development), Systematic Botany

(a) Candidates who have matriculated previously to January, 1861, will not be required to pass the Preliminary Scientific Examination in any other subjects than Chemistry and Botany; and they will be allowed to pass the Preliminary Scientific Examination and the First M.B. Examination in the same year, if they so prefer.

(the Structural and Physiological characters of the principal Natural Orders of the Vegetable Kingdom), Zoology (the typical Structure and mode of Development, with the chief deviations from each, of every class in the Animal Kingdom). This Examination shall take place on Tuesday, Wednesday, and Thursday in the week following the Examination for Honours in Chemistry and Natural Philosophy; in the morning from ten to one, and in the afternoon from three to six. In the course of the following week the Examiners shall publish, in the order of proficiency, a list of the Candidates who acquit themselves to their satisfaction. Candidates shall be bracketed together if the Examiners are of opinion that there is no clear difference between them. In determining the relative position of Candidates, the Examiners shall have regard to the proficiency in Botany and Vegetable Physiology and Zoology displayed by the Candidate at the Pass Examination. If in the opinion of the Examiners any Candidate of not more than twenty-two years of age shall possess sufficient merit, the Candidate who shall distinguish himself the most in Chemistry and Natural Philosophy, and the Candidate who shall distinguish himself the most in Biology, shall each receive an Exhibition of £40 per annum for the next two years, payable in quarterly instalments; provided that on receiving each instalment he shall declare his intention of presenting himself at the First M.B. Examination within three years from the time of his having passed the Preliminary Scientific Examination.

FIRST M.B. EXAMINATION (a).

The First M.B. Examination shall take place once in each year, and shall commence on the last Monday in July. No Candidate shall be admitted to this Examination unless he have produced certificates to the following effect:—1. Of having completed his nineteenth year. 2. Of having passed the Preliminary Scientific Examination at least one year previously. 3. Of having, subsequently to having taken a Degree in Arts or passed the Matriculation Examination, been a Student during two years at one or more of the Medical Institutions or Schools recognised by this University, and of having attended a Course of Lectures on each of three of the subjects in the following list:—Descriptive and Surgical Anatomy, General Anatomy and Physiology, Comparative Anatomy, Pathological Anatomy, Materia Medica and Pharmacy, General Pathology, General Therapeutics, Forensic Medicine, Hygiene, Midwifery and Diseases peculiar to Women and Infants, Surgery, Medicine. 5. Of having dissected during two Winter Sessions. 6. Of having attended a Course of Practical Chemistry, comprehending Practical Exercises in conducting the more important processes of General and Pharmaceutical Chemistry, in applying Tests for discovering the Adulteration of Articles in the Materia Medica, and the presence and nature of Poisons, and in the examination of Mineral Waters, Animal Secretions, Urinary Deposits, Calculi, etc. 7. Of having attended to Practical Pharmacy, and of having acquired a practical knowledge in the Preparation of Medicines.

These Certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins.

The Fee for this Examination shall be £5. No Candidate shall be admitted to the Examination unless he have previously paid this Fee to the Registrar. If a Candidate fail to pass the Examination, the Fee shall not be returned to him; but he shall be afterwards admissible to the First M.B. Examination without the payment of any additional Fee, provided that he give notice to the Registrar at least fourteen days before the commencement of the Examination.

Candidates shall be examined in the following subjects:—Anatomy, Physiology (b) (the papers in Physiology shall include questions in Histology and Comparative Anotomy), Materia Medica and Pharmacy, Chemistry, in relation to Physiology, Pharmacy, and Toxicology.

(a) Candidates who may be qualified to present themselves at the First M.B. Examination in July 1861, will be allowed, if they so prefer, to postpone their appearance at it until 1862, without thereby forfeiting their right to present themselves at the Second M.B. Examination in 1863.

(b) Any Candidate shall be allowed, if he so prefer, to postpone his Examination in Physiology from the First M.B. Examination at which he presents himself for examination in the remaining subjects, until the First M.B. Examination in the next or any subsequent year; but such Candidate shall not be admitted to compete for Honours on either occasion; and he shall not be admitted as a Candidate at the Second M.B. Examination until after the lapse of at least Twelve months after having passed his Examination in Physiology.

Such Candidates only as shall be placed in the First Division shall be admissible to the Examination for Honours.

EXAMINATION FOR HONOURS.

Any Candidate who has been placed in the First Division at the First M.B Examination may be examined for Honours in any or all of the following subjects:—Anatomy, Physiology, Histology, and Comparative Anatomy, Materia Medica and Pharmacy, and Chemistry in relation to Physiology, Pharmacy and Toxicology.

The Examinations shall take place in the week following the commencement of the First M.B. Examination. They shall be conducted by means of printed papers; but the Examiners shall not be precluded from putting *viva voce* questions upon the written answers of the Candidates when they appear to require explanation.

If in the opinion of the Examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Anatomy, the candidate who shall distinguish himself the most in Physiology, Histology, and comparative Anatomy, and the candidate who shall distinguish himself the most in Materia Medica and Pharmacy, and in Chemistry in relation to Physiology, Pharmacy, and Toxicology, shall each receive an Exhibition of £40 per annum for the next two years, payable in quarterly instalments; provided that on receiving each instalment he shall declare his intention of presenting himself at the Second M.B. Examination within three years from the time of his having passed the First M.B. Examination.

Under the same circumstances, the first and second candidates in each of the preceding subjects shall each receive a Gold Medal of the value of £5.

SECOND M.B. EXAMINATION (c).

The Second M.B. Examination shall take place once in each year, and shall commence on the first Monday in November.

No candidate shall be admitted to this Examination within two academical years of the time of his passing the First Examination, nor unless he have produced certificates to the following effect:—1. Of having passed the First M.B. Examination. 2. Of having subsequently to having passed the First M.B. Examination attended a course of lectures on each of the two subjects comprehended in the list above given, and for which the candidate had not presented certificates at the First M.B. Examination. 3. Of having conducted at least twenty labours. Certificates on this subject will be received from any legally-qualified Practitioner in Medicine. 4. Of having attended the Surgical Practice of a recognised Hospital or Hospitals during two years, with Clinical Instruction and Lectures on Clinical Surgery. 5. Of having attended the Medical Practice of a recognised Hospital or Hospitals during two years, with Clinical Instruction and Lectures on Clinical Medicine. N B. The Student's attendance on the Surgical and Medical Hospital Practice specified in Regulations 4 and 5, may commence at any date after his passing the Preliminary Scientific Examination, and may be comprised either within the same or within different years; provided that, in every case, his attendance on Hospital Practice be continued for at least eighteen months subsequently to his passing the First M.B. Examination. 6. Of having subsequently to the completion of his attendance on Surgical and Medical Hospital Practice, attended to Practical Medicine, Surgery, or Midwifery, with special charge of patients, in an Hospital, Infirmary, Dispensary, or Parochial Union, during six months. The candidate shall also produce a certificate of moral character from a teacher in the last School or Institution at which he has studied, as far as the teacher's opportunity of knowledge has extended. These certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins.

The Fee for this Examination shall be £5. No candidate shall be admitted to the Examination unless he have previously paid this fee to the Registrar. If a candidate fail to pass the Examination, the fee shall not be returned to him; but he shall be afterwards admissible to the Second M.B.

(c) The Second M.B. Examination, in the years 1861 and 1862, will be carried on under the former Regulations. Any Candidate presenting himself for it after 1862, who has passed the First M.B. Examination under the former Regulations, will be required to have also passed the Examination in Physiology and in Chemical Toxicology at some previous First M.B. Examination carried on under the new Regulations, at which Examination he shall not be allowed to compete for Honours.

*

Examination without the payment of any additional fee, provided that he give notice to the Registrar at least fourteen days before the commencement of the Examination.

Candidates shall be examined in the following subjects:—General Pathology, General Therapeutics, and Hygiene; Surgery; Medicine; Midwifery; Forensic Medicine, in its relations to Medicine, Surgery, and Midwifery. The Examinations shall include questions in Surgical and Medical Anatomy, Pathological Anatomy, and Pathological Chemistry.

Such candidates only as shall be placed in the First Division, shall be admissible to the Examination for Honours.

The Senate desire it to be understood that Bachelors of Medicine of the University of London have no right, as such, to assume the title of Doctor of Medicine.

EXAMINATION FOR HONOURS.

Any candidate who has been placed in the First Division at the Second M.B. Examination may be examined for Honours in any or all of the following subjects:—Surgery; Medicine; Midwifery.

The Examinations shall take place in the week following the commencement of the Second M.B. Examination. They shall be conducted by means of printed papers; but the Examiners shall not be precluded from putting *viva voce* questions upon the written answers of the candidates when they appear to require explanation. If in the opinion of the Examiners sufficient merit be evinced, the candidate who shall distinguish himself the most in Surgery shall receive £50 per annum for the next two years, with the style of University Scholar in Surgery. Under the same circumstances, the candidate who shall distinguish himself the most in Medicine shall receive £50 per annum for the next two years, with the style of University Scholar in Medicine. Under the same circumstances, the candidate who shall distinguish himself the most in Midwifery shall receive £30 per annum for the next two years, with the style of University Scholar in Midwifery. Under the same circumstances, the first and second candidates in each of the preceding subjects shall each receive a Gold Medal of the value of £5.

DOCTOR OF MEDICINE.

The Examination for the degree of Doctor of Medicine shall take place once in each year, and shall commence on the fourth Monday in November. No candidate shall be admitted to this Examination unless he have produced certificates to the following effect:—1. Of having taken the degree of Bachelor of Medicine in this University. 2. Of having attended, subsequently to having taken the degree of Bachelor of Medicine in this University. *a.* To Clinical or Practical Medicine during two years in an Hospital or Medical Institution recognised by this University. *b.* Or, to Clinical or Practical Medicine during one year in an Hospital or Medical Institution recognised by this University, and of having been engaged during three years in the practice of his Profession. *c.* Or of having been engaged during five years in the practice of his Profession, either before or after taking the degree of Bachelor of Medicine in this University. One year of attendance on Clinical or Practical Medicine, or two years of practice, will be dispensed with in the case of those candidates who at the second Examination have been placed in the First Division. 3. Of moral character, signed by two persons of respectability.

These Certificates shall be transmitted to the Registrar at least fourteen days before the Examination begins.

The fee for the Degree of Doctor of Medicine shall be £5. (a) No candidate shall be admitted to the Examination unless he have previously paid this fee to the Registrar. If a candidate fail to pass the Examination, the fee shall not be returned to him, but he shall be admissible to any subsequent Examination for the same degree without the payment of any additional fee, provided that he give notice to the Registrar at least fourteen days before the commencement of the Examination.

The Examination shall be conducted by means of printed papers and *viva voce* Interrogation.

Candidates shall be examined in the following subjects:—Logic and Moral Philosophy—Names, Notions, and Propositions; Syllogism; Induction and Subsidiary Operations; the Senses; the Intellect; the Will, including the Theory of Moral Obligation. (Candidates who have taken a Degree in Arts or in Science in this University, or in a University, the Degrees granted by which are recognised by the Senate of this University, shall be exempted from this part of the Examination (b). Medicine.

If, in the opinion of the Examiners, sufficient merit be evinced, the Candidate who shall distinguish himself the most at the Examination for the Degree of Doctor of Medicine shall receive a Gold Medal of the value of £20.

REGULATIONS RELATING TO CANDIDATES WHO COMMENCED THEIR MEDICAL STUDIES IN OR BEFORE JANUARY, 1839.

BACHELOR OF MEDICINE.

Candidates who commenced their Professional Studies in or before January, 1839, shall be required to pass the Preliminary Scientific Examination in Chemistry and Botany only, and shall be admitted to the First Examination for the Degree of Bachelor of Medicine on producing Certificates to the following effect:—1. Of having been engaged during two years in their Professional Studies. 2. Of having attended a Course of Lectures on each of four of the subjects comprehended in the list at page 293. 3. Of having dissected during nine months. 4. Of having attended to Practical Pharmacy during a sufficient length of time to enable them to acquire a practical knowledge of the Preparation of Medicines.

Candidates who commenced their Professional Studies in or before January, 1839, shall be admitted to the Second Examination for the Degree of Bachelor of Medicine on producing Certificates to the following effect:—1. Of having been engaged during four years in their Professional Studies. 2. Of having passed the first M.B. Examination. 3. Of having attended a Course of Lectures on each of two of the subjects comprehended in the list at page 293. 4. Of having dissected during twelve months. 5. Of having attended to Practical Pharmacy during a sufficient length of time to enable the Pupil to acquire a practical knowledge in the Preparation of Medicines. 6. Of having conducted at least six labours. 7. Of having attended the Surgical Practice of a recognised Hospital or Hospitals during Twelve months. 8. Of having attended the Medical Practice of a recognised Hospital or Hospitals during other Twelve months. 9. Of having completed the Twenty-second year of their age. 10. Of Moral Character from a teacher in the last School or Institution at which they have studied, as far as the teacher's opportunity of knowledge has extended. Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this University, will be required to translate a portion of Celsus *de Re Medica*.

REGULATIONS RELATING TO PRACTITIONERS IN MEDICINE OR SURGERY DESIROUS OF OBTAINING DEGREES IN MEDICINE.

BACHELOR AND DOCTOR OF MEDICINE—BACHELOR OF MEDICINE.

Candidates shall be admitted to the two Examinations for the Degree of Bachelor of Medicine on producing Certificates to the following effect:—1. Of having been admitted prior to the year 1840 Members of one of the legally-constituted bodies in the United Kingdom for Licensing Practitioners in Medicine or Surgery; or, of having served previously to 1840 as Surgeons or Assistant Surgeons in Her Majesty's Army, Ordnance, or Navy, or in the Service of the Honourable the East India Company. 2. Of having received a part of their education at a recognised Institution or School, as required by the Charter of the University. 3. Of Moral Character, signed by two persons of respectability. Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this University, will be required to translate a portion of Celsus *de Re Medica*.

DOCTOR OF MEDICINE.

Candidates who have been engaged during Five years in the practice of their Profession shall be admitted to the Examination for this Degree on producing Certificates to the following effect:—1. Of having been engaged during Five years in the practice of their Profession. 2. Of having taken the Degree of Bachelor of Medicine in this University. Candidates who have not taken a Degree in Arts, or passed the Matriculation Examination in this University, will be required to translate a portion of Celsus *de Re Medica*.

All these Regulations are applicable exclusively to Practitioners who obtained their Licences or Commissions prior to 1840.

(a) This Fee will continue to be £10 to all such as, having taken their M.B. Degree under the former Regulations, shall not have paid the fee of £5 at the Preliminary Scientific Examination.

(b) The Degrees in Arts of all Universities in the United Kingdom are recognised by the Senate for this purpose.

UNIVERSITY OF DURHAM.

Warden.—The Venerable Charles Thorp, D.D., F.R.S.
Reader in Medicine.—Dennis Embleton, M.D., F.R.C.S.
Professor of Mathematics.—The Rev. Temple Chevalier, B.D.
Lecturer in Chemistry.—T. Richardson, M.A.
Registrar.—The Rev. Temple Chevalier, B.D.

Regulations relating to Medical Students, passed in Convocation, in Easter Term, 1861:—

No one shall be held to be a Student in Medicine who has not been registered in a Register kept for that purpose.

No one shall be so registered unless he has passed the Registration Examination, or such other Examination as the Warden and Senate shall deem equivalent.

No grace for a Licence in Medicine shall be granted, unless the petitioner is of the age of twenty-one years, has spent four years in Medical study since his registration at one or more of the following places, namely, Durham, Newcastle-upon-Tyne, or in some other Medical School approved by the University, and has passed two public examinations.

No one shall be admissible to the first of these examinations unless he has spent four years at least in Medical study as above prescribed.

No one shall be admissible to the second of these examinations unless he has spent four years at least in Medical study as above prescribed, and has passed the first examination.

No grace for the Degree of Bachelor of Medicine shall be granted, unless the petitioner is a Licentiate in Medicine, and is of the standing of twenty-one terms (seven years) at least from the date of his registration or matriculation.

No one, who is not a Bachelor of Arts, shall be admissible to the Degree of Bachelor of Medicine, unless he has kept three terms by residence at Durham, and has passed both the final examination for the Degree of Bachelor of Arts, or an equivalent to it, and also the examination for the Degree of Bachelor of Medicine.

No grace for the Degree of Bachelor of Medicine shall be granted unless the petitioner is a Bachelor of Medicine of twenty-four terms at least (eight years) standing from his registration or matriculation, nor unless he has performed such exercises as the Warden and Senate require.

This regulation shall be held to apply to those who are already Bachelors of Medicine.

These Regulations shall not (except by the desire of Students themselves) affect any Students in Medicine who were matriculated before October 1, 1861.

These Regulations shall not interfere with the power of the University to grant Degrees by Diploma to persons of sufficient standing and approved merit.

No grace for the Degree of Master in Surgery shall be granted unless the person is of the age of twenty-one years, has spent four years in Medical and Surgical study since his registration as a Student in Medicine, in some one or more of the following places, namely, Durham, Newcastle-upon-Tyne, or other Medical School approved by the University, and has passed two public examinations.

The first of these examinations shall be the first examination appointed for Students in Medicine. No one shall be admissible to it who has not spent two years in Medical and Surgical study, as above prescribed.

The second of these examinations shall be partly the same as that appointed for Students in Medicine, and partly different from it. No one shall be admissible to it who has not spent four years at least in Medical and Surgical study, as above prescribed, and passed the first examination.

Regulations relating to persons now Students in Medicine at the Newcastle-upon-Tyne School of Medicine:—

1. Any Student in Medicine who has pursued his Medical studies in the Newcastle-upon-Tyne College of Medicine before the 1st day of August, 1861, and has been matriculated at the University of Durham before the same date, shall be entitled to count the time thus spent at Newcastle as if it had been spent after registration, provided he passes one of the ordinary Registration Examinations before October 31, 1862.

2. Any Student in Medicine who has spent two or more years in Medical study at Newcastle-upon-Tyne College of Medicine before the 1st day of August, 1861, and has been matriculated at the University of Durham before the same date, shall be admissible to the second and final examination for a Licence in Medicine, or for the Degree of Master in Surgery, without having passed the first examination, provided he has passed one of the ordinary registration examinations before October 31, 1862, and has completed four years of Medical study since his admission as a Medical Student at Newcastle.

Order of Senate relating to the Registration of Students in Medicine, and to the Registration Examination. Passed May 21, 1861:—

1. The name of every Student in Medicine shall be placed on a Register kept by the Registrar of the University of Durham.

2. No one shall be registered unless he has produced to the Warden the requisite Certificates of Examination and character.—The requisite Certificate of Examination shall be a certificate of his having passed either the Registration Examination appointed by the University of Durham, or any one of the examinations named in the Minutes of the Medical Council for England, No. 24.

Subjects of Examination for the Registration of Medical Students at Durham, in September, 1861, and in April, 1862:—

1. The History contained in St. Matthew's Gospel.
2. English Grammar and Writing from Dictation.
3. Arithmetic, including Vulgar and Decimal Fractions.
4. History of the Reign of Elizabeth.
5. To draw from memory an outline map showing the coast line, the chief ranges of mountains, and the principal rivers of some one of the following countries, to be selected by the Examiners:—Great Britain, Ireland, Italy. Questions also will be set in the geography of these countries.
6. Translations, with grammatical questions, from some one of the following subjects, to be selected by the candidates:—1. Cæsar de Bello Gallico, Book iv. 2. Cicero, de Amicitia. 3. Virgil. First Book of the Æneid. Horace. First Book of the Odes.
7. Any candidate may, if he pleases, offer himself for examination in the French language:—Subject—Voltaire's History of Charles XII.

The Examinations will begin at Durham, on Tuesday, September 24, 1861; and on Tuesday, April 29, 1862, at 9 a.m. on each day.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

President.—Dr. Thomas Mayo.
Censors.—Drs. Copland, A. Farre, Chambers, and Monro.
Treasurer.—Dr. Alderson.
Registrar.—Dr. H. A. Pitman.
Secretary.—Mr. W. Copney.

The following Regulations were issued on December 22, 1860, and are now in force:—

The College will, under its charter, grant licences (which are not to extend to make the Licentiates Members of the Corporation) to persons who shall conform to the following Bye-Laws:—

Every candidate for the College licence (except in cases specially exempted) is required to produce satisfactory evidence to the following effect:—

1. Of having attained the age of twenty-one years.
2. Of moral character.
3. Of having passed a Preliminary Examination in the subjects of general education.
4. Of having been registered as a Medical Student by one of the bodies named in Schedule (A) of the Medical Act.
5. Of having been engaged in Professional studies during four years, of which, at least, three years shall have been passed at a recognised Medical school or schools, and of having attended to Medical practice at a recognised Hospital or Hospitals, during two years of that period; six months to the Surgical practice, and six months to the clinical study of diseases of women. The two latter may be attended concurrently with the attendance on Medical practice.
6. Of having studied the following subjects:—Anatomy (with Dissections) during two Winter Sessions of 6 months each. Physiology during two Winter Sessions of 6 months each. Chemistry during 6 months. Practical Chemistry during 3 months. Materia Medica during 3 months. Practical Pharmacy during 3 months. Botany during 3 months. Principles and Practice of Medicine during two Winter Sessions of 6 months each. It is desired that the study of

the Principles and Practice of Medicine should comprise the study of the principles of public health. Morbid Anatomy during 6 months. Or certified attendance in the Post-Mortem Room during the period of clinical study. Clinical Medicine during one Winter Session and one Summer Session, or 9 months. By Clinical Medicine is intended lectures on cases under observation, or special instruction at the bedside certified by the teacher. Principles and Practice of Surgery during 6 months. Midwifery and the Diseases of Women during three months. A certificate must also be produced of having attended not less than twenty labours. Forensic Medicine during 3 months.

7. Of having passed the Professional Examination.

Students preparing for the examination for the licence are required either to register at this College within fourteen days from the commencement of each Session, or to furnish proof before admission to examination, of having been thus registered by one of the Bodies named in Schedule (A) of the Medical Act.

THE PRELIMINARY EXAMINATION.

1. Every candidate for the College licence (except in cases specially exempted) is required to have passed an examination by examiners appointed by the College, on the following subjects:—English, Latin, English History, Modern Geography, Mathematics, and Natural Philosophy, or he shall produce testimonials satisfactory to the examiners of his proficiency in those branches of knowledge, and he shall undergo an examination in regard to any subject to which his testimonials do not extend. In the Preliminary Examination English will include English Grammar and Composition. Latin will include Selections from one or more of the Classical Authors ordinarily read in schools. Mathematics will include the ordinary Rules of Arithmetic, Vulgar and Decimal Fractions, Simple Equations, and the First Book of Euclid. Natural Philosophy will include Mechanics, Acoustics, Hydrostatics, Hydraulics, Pneumatics, and Opties. Such a knowledge of these subjects will be expected as may be obtained from attendance on a course of lectures, or from elementary treatises on physics, or natural philosophy.

2. The Preliminary Examination must be passed previous to, *or in the course of*, (a) the first year of Medical study; but in the case of candidates who shall have commenced the prescribed course of Medical studies before October 1, 1861, the examination in general education may be passed at any time before the examination for the licence.

3. Every candidate intending to present himself for the Preliminary Examination must give fourteen days' notice in writing to the Registrar of the College, and before he is admitted to the examination he must pay a fee of two guineas. Should he fail to pass the examination, the fee will not be returned, but he may be admitted to a subsequent Preliminary Examination without the payment of an additional fee. The Preliminary Examination will be held at the College in April, July, and September:—Tuesday, April 23, July 23, September 24. Wednesday, April 24, July 24, September 25. Tuesday morning, 10 to 1. English and Latin. English will include English Grammar and Composition. Latin will include selections from the following authors:—September, 1861—Cicero de Senectute, Odes of Horace, Book iv. April, 1862—Cicero de Amicitia, Virgilii Æneis. Lib. i. July, 1862—Cicero de Natura Deorum. Lib. i., Virgilii Æneis. Lib. ii. September, 1862—Horace's Odes, Book ii. Cornelius Nepos. Life of Miltiades. Wednesday morning, 10 to 1. English History and Modern Geography. Wednesday afternoon, 2 to 5. Mathematics and Natural Philosophy. Mathematics will include the ordinary Rules of Arithmetic, Vulgar and Decimal Fractions, Simple Equations, the First Book of Euclid. Natural Philosophy will include Mechanics, Acoustics, Hydrostatics, Hydraulics, Pneumatics and Optics. Such a knowledge of these subjects will be expected as may be obtained from attendance on a course of lectures, or from elementary treatises on physics, or natural philosophy.

The examination will be conducted in writing; but the examiners are not precluded from questioning any candidate orally, if they think fit.

The Preliminary Examination must be passed previous to, *or in the course of*, (b) the first year of Medical study; but in the case of candidates who shall have commenced the prescribed course of Medical studies before October 1, 1861, the examination in general education may be passed at any time before the examination for the licence.

A candidate who shall fail to pass the examination, will not be re-admitted to examination until after the lapse of six months.

Every candidate intending to present himself for the Preliminary Examination, must give fourteen days' notice in writing to the Registrar of the College, and before he is admitted to the examination he must pay a fee of two guineas.

Testimonials of proficiency granted by the National Educational Bodies according to the following list, with such additions as may from time to time be made, will be accepted by the Examiners as satisfactory, in lieu of the Preliminary Examination conducted at the College:—A Degree in Arts of any University of the United Kingdom, of the Colonies, or of such other Universities as may be specially recognised, from time to time, by the Medical Council. Oxford Responsions or Moderations. Cambridge Previous Examinations. Matriculation Examination of the University of London. Oxford Middle Class Examinations, Senior and Junior. Cambridge Middle Class Examinations, Senior and Junior. Durham Middle Class Senior Examination. Dublin University Entrance Examination. An Examination by any other University of the United Kingdom, equivalent to the Middle Class Examinations of Oxford or Cambridge. An Examination established by any of the Bodies named in Schedule (A) of the Medical Act, approved by the Medical Council.

THE PROFESSIONAL EXAMINATION.

Students preparing for the Examination for the Licence are required either to register at this College, within fourteen days from the commencement of each Session, or to furnish proof, before admission to Examination, of having been thus registered by one of the Bodies named in Schedule (A) of the Medical Act.

The Examination is divided into two parts. The First Part will be conducted as follows:—On the First day, from 7 to 10 p.m., by written questions on Anatomy and Physiology; on the Second day, from 7 to 10 p.m., by written questions on Chemistry, Materia Medica, and Practical Pharmacy; on the Third day, no Examination; on the Fourth day, commencing at seven o'clock p.m., *vivâ voce*, on the subjects stated above.

The Second Part will be conducted as follows:—On the First day, from 7 to 10 p.m., by written questions on Midwifery and the Diseases of Women; on the Second day from 7 to 10 p.m., on the Principles and Practice of Medicine and Forensic Medicine; on the Third day, no Examination; on the Fourth day, commencing at seven o'clock, *vivâ voce*, on the subjects stated above.

The Candidate's knowledge of Practical Medicine will also be tested by requiring him to examine persons labouring under disease, either at the College or in the Wards of an Hospital.

The first part of the Professional Examination is to be undergone after the termination of the Second Winter Session of Study at a recognised Medical School, and the second part after an interval of at least eighteen months from the First Examination, except in the case of students who have commenced their Professional education before October, 1861.

Due notice will be given in the Medical Journals of the periods at which the Examinations take place, or they may be learnt on application at the College.

Every Candidate intending to present himself for examination, must give fourteen days' notice in writing to the Registrar of the College, with whom all certificates and testimonials must be left fourteen days before the day of examination.

Blank forms of the required certificates of attendance on Hospital Practice and on Lectures may be obtained on application to the Secretary at the College.

The fee for admision to the first part of the Examination is five guineas; the fee for admission to the second part of the Examination is ten guineas; and there is no further fee for the Licence.

Any "Registered Medical Practitioner," whose qualification or qualifications shall have been obtained before the 1st day of January, 1861, having produced satisfactory evidence of moral character, will be admitted a candidate for the

(a) This Section is about to be altered by the omission of the words in italics.

(b) The words in italics are about to be omitted.

Licence, and will be examined on the Principles and Practice of Medicine and Midwifery, but he will be exempted from such other parts of the Examinations hereinbefore described, as his qualifications may seem to the Examiners to justify.

The fee for admission to Examination is fifteen guineas, and there is no further fee for the Licenee.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

LINCOLN'S-INN-FIELDS.

President.—Cæsar Henry Hawkins.*

Vice-Presidents.—James Luke,* and Frederick Carpenter Skey.*

The Council.—William Lawrence,* Sir Benjamin Collins Brodie, Bart., Joseph Swan, Edward Stanley,* Joseph Henry Green,* James Moncrieff Arnott,* John Flint South,* Joseph Hodgson,* Thomas Wormald,* Gilbert Wakefield Mackmurdo, Francis Kiernan, William Coulson, George Gulliver, Richard Partridge, John Hilton, Richard Quain, Edward Cock, Samuel Solly, Thomas Tatum, Alexander Shaw, and William Fergusson.

Board of Examiners in Midwifery.—James Luke, Dr. Arthur Farre, Dr. Henry Oldham, Dr. Robert Lee.

Examiners for the Fellowship in Classics, Mathematics, and French.—Goldwin Smith, George Gabriel Stokes, Isidore Brasseur.

Professor of Human Anatomy and Surgery.—John Hilton.

Professor of Comparative Anatomy and Physiology.—George Gulliver.

Professor of Histology and Conservator of the Museum.—

Assistants in the Museum.—Thomas Howard Stewart and Charles Bader.

Librarian.—John Chatto.

Secretary.—Edmund Belfour.

Assistant-Secretary.—E. J. Trimmer.

Clerk.—Thomas Madden Stone.

* Those marked (*) are Members of the Court of Examiners.

REGULATIONS RESPECTING THE EDUCATION AND EXAMINATION OF CANDIDATES FOR THE DIPLOMA OF MEMBER OF THIS COLLEGE.

Section I.—Preliminary General Education and Examination.—Candidates who have commenced their Professional Education on or after January 1, 1861, will be required to produce one or other of the following Certificates:—1. Of Graduation in Arts at an University recognised for this purpose. 2. Of having passed an Examination for Matriculation, or such other Examination as shall, in either case, from time to time be sanctioned by the Council of this College, at an University in the United Kingdom, or at a Colonial or foreign University recognised by the Council of this College. 3. Of having passed the Oxford, Cambridge, or Durham Middle-Class Examinations, either Junior or Senior. 4. Of having passed the Preliminary Examination for the Fellowship of this College. 5. Of having passed the Previous Examination of the University of Cambridge. 6. Of having passed the First-Class Examination of the College of Preceptors. 7. Of having passed the Durham Examinations of Students in Arts in their second and first years. 8. Candidates who shall not be able to produce one or other of the foregoing Certificates will be required to pass an Examination, in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of the Council of this College. N.B. The Examination (No. 8) is usually held in the month of June in each year.

The following are the subjects of the Preliminary Examination (No. 8) during the year 1862, viz.:—Part I.—1. Reading aloud a passage from some English author. 2. Writing from dictation. 3. English Grammar. 4. Writing a short English composition; such as a description of a place, an account of some useful or natural product, or the like. 5. Arithmetic. No candidate will be passed who does not show a competent knowledge of the first four rules, simple and compound, and of VulgarFractions. 6. Questions on the Geography of Europe, and particularly of the British Isles. 7. Questions on the outlines of English History, that is, the succession of the Sovereigns and the leading events of each reign. Part II.—Papers will also be set on the following eight subjects, and each Candidate will be required to offer himself for examination on one subject at least, at the option of the Candidate; but no Candidate will be allowed to offer himself for examination on more than four subjects:—1. Translation of a passage from the first book of Cæsar's Commentaries, "De Bello Gallico. 2. Translation of a passage from St. John's Gospel in Greek. 3. Translation of a passage from Voltaire's "Histoire de Charles XII." 4. Translation of a passage from the first two books of Schiller's "Geschichte des dreissigjährigen Krieges." Besides these Translations into English, the Candidate will be required to answer questions on the Grammar of each selected subject. 5. Mathematics. Euclid, Books I. and II. Algebra to Simple Equations inclusive. 6. Mechanics. The questions will be chiefly of an elementary character. 7. Chemistry. The questions will be on the elementary facts of Chemistry. 8. Botany and Zoology. The questions will be on the classification of Plants and Animals. The quality of the handwriting and the spelling will be taken into account. The Fee on admission to examination (No. 8) is the same as that paid at the Oxford Junior Middle-Class Examination.

Section II.—Professional Education.—I. Candidates who shall commence their Professional Education on or after October 1, 1862, will not be allowed to register the commencement of attendance on Lectures or Hospital Practice before they shall have passed an Examination in General Literature, in conformity with the regulation of the Council in relation thereto.

II. The following will be considered as the commencement of Professional Education:—1. Attendance on the Practice of an Hospital, Dispensary, or other Public Institution recognised by this College for that purpose.(a) 2. Instruction as the Pupil of a Member of one of the Royal Colleges of Surgeons in the United Kingdom, or of the Faculty of Physicians and Surgeons of Glasgow.(a) 3. Attendance on Lectures on Anatomy, Physiology, Chemistry, or Natural Philosophy, by Lecturers recognised by this College. The Certificate of the commencement of professional study in any one of the foregoing modes must be transmitted to the College within one week of such commencement, and a Certificate of the continuance of such attendance or instruction during the period of six months must be transmitted to the College immediately upon the termination thereof, in order that the same may be registered for future reference.

III.—Candidates will be required to produce the following other Certificates, viz.:—1. Of being twenty-one years of age. 2. Of having been engaged during four years in the acquirement of professional knowledge. 3. Of having studied Practical Pharmacy during three months. 4. Of having attended Lectures on Anatomy, delivered not less frequently than four times in each week, during two Winter Sessions. 5. Of having performed Dissections during not less than two Winter Sessions. 6. Of having attended Lectures on Physiology delivered not less frequently than twice in each week, during two Winter Sessions. 7. Of having attended Lectures on Surgery during two Winter Sessions. 8. Of having attended one Course of Lectures on each of the following subjects, viz., Chemistry, Materia Medica, Medicine, and Midwifery. 9. Of Instruction and Proficiency in the practice of Vaccination. 10. Of having attended, at a recognised Hospital or Hospitals in the United Kingdom or Colonies, the Practice of Surgery, and Clinical Lectures on Surgery, during three Winter (b) and two Summer (c) Sessions. 11. Of having attended, at a recognised Hospital or Hospitals in the United Kingdom or Colonies, the Practice of Medicine, and Clinical Lectures on Medicine during one Winter and one Summer Session.

N.B.—Blank forms of the required Certificates may be obtained on application to the Secretary, and all such Certificates will be retained at the College.

Section III.—I. Certificates will not be received on more than one branch of science from one and the same lecturer:

(a) Attention being paid in either of the foregoing cases to Practical Pharmacy.

(b) The Winter Session comprises a period of six months, and, in England, commences on the 1st of October, and terminates on the 31st of March.

(c) The Summer Session comprises a period of three months, and, in England, commences on the 1st of May and terminates on the 31st of July.

but Anatomy and Dissections will be considered as one branch of science.

II. Certificates will not be recognised from any Hospital in the United Kingdom unless the Surgeons thereto be members of one of the legally-constituted Colleges of Surgeons in the United Kingdom; nor from any School of Anatomy and Physiology or Midwifery, unless the teachers in such School be members of some legally-constituted College of Physicians or Surgeons in the United Kingdom; nor from any School of Surgery, unless the teachers in such School be members of one of the legally-constituted Colleges of Surgeons in the United Kingdom.

III. No metropolitan Hospital will be recognised by this College which contains less than 150, and no Provincial or Colonial Hospital which contains less than 100 patients.

IV. The recognition of Colonial Hospitals and Schools is governed by the same regulations, with respect to number of patients and to Courses of Lectures, as apply to the recognition of Provincial Hospitals and Schools in England.

V. Certificates of attendance, commenced subsequently to the 8th of December, 1859, upon the practice of a recognised Provincial or Colonial Hospital unconnected with, or not in convenient proximity to, a recognised Medical School, will not be received for more than one Winter and one Summer Session of the Hospital attendance required by the regulations of this College; and in such cases Clinical Lectures will not be required.

VI. Certificates will not be received from Candidates who have studied in London, unless they shall have registered at the College their cards of admission to attendance on Lectures and Hospital Practice within fifteen days from the commencement of the Session; nor from Candidates who have studied elsewhere, unless their names shall be duly returned from their respective Schools.

VII. Those Candidates who shall have pursued their studies in Scotland or Ireland will be admitted to Examination upon the production of the several Certificates required respectively by the Colleges of Surgeons of Edinburgh and Ireland from Candidates for their diploma; or in the cases of recognised foreign or colonial Universities, by the authorities of those Universities for their Degree.

VIII. Members or Licentiates of any legally-constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University requiring residence to obtain Degrees, and recognised by this College, will be admitted for examination on producing their diploma, licence, or degree, together with proof of being twenty-one years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

IX. Graduates in Medicine of any legally-constituted College or University requiring residence to obtain degrees, and recognised by this College, will be admitted to examination on adducing, together with their diploma or degree, proof of being twenty-one years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

Section IV.—Professional Examination.—This Examination is divided into two parts. 1. The First or Primary Examination, on Anatomy and Physiology, is partly written and partly demonstrative on the recently dissected subject, and on prepared parts of the human body. 2. The Second or Pass Examination, on Pathology, Surgery, and Surgical Anatomy, is partly written and partly oral. 3. The Primary Examinations are held in the months of January, April, May, July, and November, and the Pass Examinations generally in the ensuing week respectively. 4. Candidates will not be admitted to the Primary, or Anatomical and Physiological Examination, until after the termination of the second Winter Session of their attendance at a recognised School or Schools; nor to the Pass, or Pathological and Surgical Examination, until after the termination of the fourth year of their professional education. 5. Candidates, being Graduates in Medicine of either of the Universities of Oxford, Cambridge, or London, will be required to present themselves for the Pass Examination in Surgery only. 6. The fee of Five Guineas paid by each Candidate prior to his Primary Examination will not be returned, but will be allowed in the fee on his admission as a Member. 7. a Candidate having entered his name for either the Primary or Pass Examination, who shall fail to attend the meeting of the Court for which he shall have received a card, will not be allowed to present himself for examination within the period of three months from the date at which he shall have so failed to attend.

THE SOCIETY OF APOTHECARIES,

BLACKFRIARS.

Master.—W. Buchanan, Esq.

Wardens.—C. Wheeler, Esq., and H. Combe, Esq.

Court of Examiners.—Dr. T. Ansell, Chairman; Dr. W. P. Brodribb, Dr. R. H. Robertson, Dr. R. King, Dr. T. Peregrine, Dr. G. Corfe, Dr. R. H. Semple, Dr. W. G. T. Dyer, Dr. C. Taylor, Dr. H. M. Rowdon, Dr. Stephen H. Ward, Dr. J. S. Stocker.

Secretary to the Court of Examiners.—A. M. Randall, Esq.

Professor of Chemistry and Materia Medica.—W. T. Brande, Esq., D.C.L., F.R.S.

Examiner for the Society's Prizes in Botany.—Joseph D. Hooker, Esq., M.D., F.R.S., F.L.S.

Clerk to the Society.—R. B. Upton, Esq.

Curator of the Society's Botanic Garden.—Mr. Thomas Moore.

Beadle.—Mr. C. Rivers.

The Court of Examiners of the Society of Apothecaries, in revising their Regulations and Curriculum of Study, have found it necessary to make but few alterations in order fully to meet the recommendations of the General Council of Medical Education and Registration.

The Court have always regarded the term of apprenticeship required by the Act of Parliament of 1815, as a period of study to be employed by the pupil, under the superintendence of a Practitioner, not merely in dispensing medicines, but also in attendance on Lectures and Hospital Practice; and they have felt justified (after a careful consideration of the clause in the Act relating to apprentices) in giving to it this enlarged and liberal interpretation.

The Court, therefore, in accordance with the recommendations of the Medical Council, suggest, that all Students do present themselves for the Preliminary Examination in Arts at the termination of the first year of their pupilage, which year may also be profitably employed in obtaining a knowledge of Practical Pharmacy.

REGULATIONS, ETC.

Every candidate for a certificate of qualification to practise as an Apothecary, will be required to produce testimonials:—

1. Of having passed a Preliminary Examination in Arts as a test of General Education.

This Examination must be passed before the commencement of Professional Studies, which is defined by the Medical Council "to be the time of commencing studies at a Medical School."

2. Of having served an apprenticeship or pupilage of not less than five years to a Practitioner qualified by the Act of 1815.

3. Of having attained the full age of twenty-one years:—As evidence of age, a copy of the baptismal register will be required in every case where it can possibly be procured.

4. Of good moral conduct.

5. And of having pursued a course of Medical study in conformity with the regulations of the Court.

COURSE OF STUDY.

Every candidate whose attendance on lectures shall commence on or after the 1st of October, 1861, must attend the following Lectures and Medical Practice during not less than four winter and four summer sessions: each winter session to consist of not less than six months, and to commence not sooner than the 1st nor later than the 15th of October; and each summer session to extend from the 1st of May to the 31st of July.

First Year.—Winter Session.—Chemistry; Descriptive Anatomy; Physiology. Summer Session.—Botany; Materia Medica and Therapeutics; Practical Chemistry (a).

Second Year.—Winter Session.—Anatomy and Physiology; Anatomical Demonstrations and Dissections; Principles and Practice of Medicine; Clinical Medical Practice. Summer

(a) By Practical Chemistry is intended, a *specific* course of Instruction in the Laboratory, with an opportunity of Personal Manipulation in the ordinary processes of Chemistry, and of acquiring a knowledge of the various Re-Agents for Poisons.

Session.—Midwifery and Diseases of Women and Children; Clinical Medical Practice.

Third Year.—Winter Session.—Principles and Practice of Medicine; Clinical Medical Practice and Morbid Anatomy. Summer Session.—Clinical Lectures; Forensic Medicine and Toxicology; Clinical Medical Practice and Morbid Anatomy.

Fourth Year.—Winter Session.—Practical Midwifery (b); Vaccination; Clinical Medical Practice and Morbid Anatomy. Summer Session.—Practical Midwifery; Vaccination; Clinical Medical Practice and Morbid Anatomy.

Those gentlemen whose attendance on lectures commenced before the 1st of October, 1861, will be allowed to complete their studies in conformity with the previous regulations of the Court, provided they are registered.

Registration of Testimonials.—All testimonials must be given on a printed schedule, and the blanks therein must be filled up by the lecturers themselves. Students will be supplied with schedules at the time of their first registration:—In London, at this Hall. In the Provincial towns, from the gentlemen who keep the Registers of the Medical Schools; and whose names may be known by application to the Secretary of this Court. All students, in London, are required personally to register the several classes for which they have taken tickets; and those only will be considered as complying with the regulations of the Court, whose names and classes in the register correspond with their schedules. Tickets of admission to lectures and Medical practice must be registered in the months of October and May. Due notice of the days and hours of such registrations will be given from time to time. The Court also require Students at the Provincial Medical Schools to register their names in their own handwriting, with the Registrar of each respective School, within the first fifteen days of October, and first fifteen days of May.

Examination in Arts.—An Examination in Arts will take place at the Hall three times in the year. Due notice will be given of the time at which each Examination will be held. N.B. By order of the Medical Council, an Examination in arts is compulsory on all gentlemen commencing their studies on or after the 1st of October, 1861, and must be passed previous to registration. Testimonials of proficiency in General Education will be received, as exempting from the Examination in Arts at this Hall, from the following National Educational bodies, and also from any of the Licensing bodies under the Medical Act of 1858. A Degree in Arts of any University of the United Kingdom, or of the Colonies, or of such other Universities as may be specially recognized from time to time by the Medical Council. Oxford Responsions or Moderations. Cambridge Previous Examinations. Matriculation Examination of the University of London. Oxford Middle Class Examinations, senior and junior. Cambridge Middle Class Examinations, senior and junior. Durham Middle Class Examinations, senior and junior. Durham Examinations for Students in Arts, in their second and first years. Durham Registration Examination for Medical Students. Dublin University Entrance Examination. Queen's University, Ireland, two years' Arts' course for the Diploma of Licentiate in Arts. Preliminary Examinations at the end of A.B. course. Middle Class Examinations. Matriculation Examinations. First Class Certificate of the College of Preceptors.

Professional Examinations.—The Court of Examiners meet in the Hall every Thursday, where candidates are required to attend at a quarter before four o'clock. Every person intending to offer himself for examination must give notice in writing to the Clerk of the Society on or before the Monday previous to the day of Examination, and must at the same time deposit all the required testimonials (as before specified) at the office of the Beadle, where attendance is given every day, except Sunday, from Ten until Four o'clock. The Examination of candidates is divided into two parts, and is conducted partly in writing and partly *vivâ voce*.

First Examination, which may be passed after the Second Summer Session, embraces the following subjects:—Latin of the Pharmacopœia and Physicians' Prescriptions; Anatomy and Physiology; General and Practical Chemistry; Botany and Materia Medica.

Second Examination, after the Fourth Summer Session (the five years' pupilage being completed):—Practice of Medicine and Pathology; Midwifery, including the Diseases of Women and Children; Forensic Medicine and Toxicology.

The examination of Candidates for certificates of qualification to act as Assistant, in compounding and dispensing medicines, will be as follows:—In translating Physicians' Prescriptions, and the Pharmacopœia Londinensis; in Pharmacy and Materia Medica.

By the 22nd section of the Act of Parliament, no rejected Candidate can be re-examined until the expiration of six months from his former Examination; and no rejected Candidate as an Assistant until the expiration of three months.

Fees.—For a Certificate of Qualification to practise, six guineas; for an Assistant's Certificate, two guineas.

(b) A Certificate of Attendance, on not less than twenty cases, will be received from a legally qualified Practitioner.

ARMY MEDICAL DEPARTMENT.

Director-General.—Dr. Gibson, C.B., Honorary Physician to Her Majesty.

Head of Sanitary Branch.—Dr. Logan, C.B., Inspector-General of Hospitals, Honorary Physician to her Majesty.

Head of Statistical Branch.—Dr. Balfour, F.R.S., Deputy-Inspector-General.

Head of Medical Branch.—Dr. Mapleton, F.R.C.P., Deputy-Inspector-General.

Staff Surgeons.—Dr. Smith and Mr. Fitzgerald, attached to the office.

Chief Clerk.—John Wimbridge, Esq.

The name of no gentleman can be placed on the list who does not possess a diploma from the Royal College of Surgeons of England, Scotland, or Ireland, or from the Faculty of Physicians and Surgeons of Glasgow, or other corporate body legally entitled to grant a diploma in Surgery, as well as a legal qualification to practise Medicine from one of the bodies enumerated in Schedule A of the Medical Act, and who cannot produce the prescribed testimonials of attendance.

The Candidates must be unmarried, not beyond twenty-five years of age, nor under twenty-one years.

Before promotion from the rank of Assistant-Surgeon to any higher rank, every gentleman must be prepared to undergo the examination laid down in the regulations.

Licences and Diplomas must be lodged at the office for examination and registry at least one week before the candidate appears for examination; likewise certificates of moral conduct and character—one of them by the parochial minister, if possible. Baptismal certificates are required at the same time; and if the parish register cannot be resorted to, an affidavit from one of the parents, or from some near relative who can attest the fact, will be accepted.

Note.—All communications to the Director-General, not prepaid, to be forwarded, addressed *outside* to "The Under-Secretary of State for War," with the words, "Army Medical Department," at the left-hand corner.

The following is a copy of the Warrant by which the rank, pay, and designation of Army Medical Officers are now regulated:—

Victoria R.—Whereas, we have taken into our consideration the recommendations of the Commissioners appointed by our authority to inquire into the regulations affecting the sanitary condition of our military forces, and the Medical treatment of the sick and wounded of our army; our will and pleasure is, that, from and after the date of this warrant, the following rules shall be established for the future admission promotion, and retirement, and the pay, half-pay, relative rank, and allowances of the Medical officers of our army, and that by these rules our Commander-in-Chief shall govern himself in recommending officers for admission, promotion, and retirement.

1. The grades of Medical officers in our army shall be four in number, viz.:—

(1.) Inspector-General of Hospitals. (2.) Deputy-Inspector-General of Hospitals. (3.) Staff or Regimental Surgeon; who, after twenty years' full-pay service in any rank, shall be styled Surgeon-Major. (4.) Staff or Regimental Assistant-Surgeon.

2. No Candidate shall be admitted to the Competitive Examination for a commission in the Medical Department of our Army who does not possess such a certificate or certificates as would qualify a civilian to practise Medicine and

Surgery; and no such Candidate shall receive a commission as Assistant-Surgeon until he shall have satisfactorily passed an Examination in Military Medicine, Surgery, and Hygiene, after attending the authorised course in a general Military Hospital.

3. No Assistant-Surgeon shall be eligible for promotion to the rank of Surgeon until he shall have passed such examination as our principal Secretary of State for War may require, and shall have served on full-pay with the commission of Assistant-Surgeon for five years, of which two shall have been passed in or with a regiment.

4. A Surgeon, whether on the staff or attached to Regiments, must have served ten years in the army, with a commission on full-pay, of which two must have been passed, with the rank of Surgeon, in or with a regiment, before he will be eligible for promotion to the rank of Inspector-General of Hospitals.

5. A Deputy Inspector-General of Hospitals must have served five years at home, or three abroad, in that rank, before he shall be eligible for promotion to the rank of Inspector-General.

In cases, however, of emergency, or when the good of the service renders such alteration desirable, it shall be competent for our Secretary of State for War to shorten the several periods of service above mentioned, in such a manner as he shall deem fit and expedient.

6. Assistant-Surgeons shall, as a general rule, be promoted to the rank of a Surgeon in the order of their seniority in the service, unless unfit for the discharge of their duties from physical or Professional incompetence, or misconduct. In cases of distinguished service, however, an Assistant-Surgeon may be promoted without reference to seniority; and in such cases, with a view to insure the responsibility attaching to an appointment made out of the regular course of promotion, the recommendation in which the services of the officer shall be detailed, shall be published in the general orders of the army and in the *Gazette* in which his promotion appears.

7. All promotion from the rank of Surgeon to that of Deputy-Inspector, and from the rank of Deputy-Inspector to that of Inspector, shall be given by selection for ability and merit; and the grounds of such selection shall be stated to us in writing, and recorded in the office of our Commander-in-Chief, the selection being made from the whole rank of Surgeons, whether styled Surgeons or Surgeons-Major.

8. The rates of pay per day of the Medical officers of our Army shall be in accordance with the following Schedule:—

Rank.	After 30 years' Service on Full-pay.	After 25 years' Service on Full-pay.	After 20 years' Service on Full-pay.	After 15 years' Service on Full-pay.	After 10 years' Service on Full-pay.	After 5 years' Service on Full-pay.	Under 5 years' Service on Full-pay.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Inspector-General	2 5 0	2 5 0	2 0 0*	..	..	..	..
Deputy-Inspector-General	1 14 0	1 10 0	1 8 0*	..	..	..	..
Surgeon-Major ..	..	1 5 0	1 2 0	..	..	..	..
Surgeon	..	..	..	0 18 0	0 15 0*	..	..
Assistant-Surgeon	..	..	..	..	0 13 0	0 11 6	0 10 0

* Or on promotion, should these periods of service not be already completed.

9. In addition to the pay of their ranks, officers at the head of the Medical Department on foreign stations shall receive allowances at the undermentioned rates, when serving under the following circumstances, viz.:—

If with an army in the field, of 10,000 men or upwards .. .. 20s. per day.
If with an army in the field, of 5000 men or upwards .. .. 15s. ,,
If with an army in the field, of any less number 10s. ,,
If serving in a colony where the forces consist of 1500 men or upwards .. .. .. 5s. ,,

10. After the date of this warrant every Medical officer placed on half-pay by reduction of establishment, or on the report of a Medical Board, in consequence of being incapacitated by reason of ill-health, caused by wounds, or brought on by the discharge of his duty, shall be allowed the half-pay to which his period of full-pay service may entitle him, according to the following Schedule:—

Rank.	After 30 years' Service on Full-pay.	After 25 years' Service on Full-pay.	After 20 years' Service on Full-pay.	After 15 years' Service on Full-pay.	After 10 years' Service on Full-pay.	After 5 years' Service on Full-pay.	Under 5 years' Service on Full-pay.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Inspector-General	1 17 6	1 13 6	1 10 0	..	..	..	..
Deputy-Inspector-General	1 5 6	1 2 6	1 1 0	..	..	..	..
Surgeon-Major ..	..	0 18 6	0 16 6	..	..	..	..
Surgeon	..	..	..	0 13 6	0 11 0	..	..
Assistant-Surgeon	..	..	..	..	0 10 0	0 8 0	0 6 0

11. With a view to maintain the efficiency of the service, all Medical officers of the rank of Surgeon-Major, Surgeon, or Assistant-Surgeon, shall be placed on the retired list when they shall have attained the age of fifty-five years, and all Inspectors-General, and Deputy Inspectors-General, when they shall have attained the age of sixty-five years.

Officers thus superannuated shall be entitled to the rates of half-pay stated in the preceding Schedule.

12. Every Medical officer who shall have served upon full-pay for twenty-five years and upwards, shall have the right to retire on half-pay, at the rate of seven-tenths of the daily pay he was in the receipt of when thus retiring, provided he shall have served three years in the rank from which he retires, or shall have served in any rank for ten years in the colonies, or five years with an army in the field. But, if he shall not have complied with any one of these conditions, he shall be entitled to only half-pay, at the rate of seven-tenths of the daily pay he was in receipt of before his last promotion.

13. Every Medical Officer thus claiming to retire, must give six months' notice to the head of his department of his intention to claim this right, prior to his being allowed to retire; and no Medical officer shall have a right to give such notice after he shall be under orders to proceed to any foreign station, until he shall have served at such station for one month.

14. If a Medical officer is placed on half-pay from any other cause than those hereinbefore named, he shall only be allowed a temporary rate of half-pay (not exceeding the rates stated in Clause 10), at such period and at such rate as shall be assigned to him by our Secretary of State for War, on a consideration of the length and character of the services rendered to the public by such Medical officer.

15. On reduction of establishment, the Surgeon and Assistant-Surgeon who are junior in the ranks, shall be the first reduced, and, on restoration to full-pay, the reduced officers who are senior in their ranks shall be the first restored.

16. The relative rank of the Medical officers of our army shall be as follows:—Staff or Regimental Assistant-Surgeon as a lieutenant, according to the date of his commission; and, after six years' full pay service, as captain, according to the date of the completion of such service. Staff or Regimental Surgeon as major, but junior of that rank, and Surgeon-major, as lieutenant-colonel, but junior of that rank. Deputy Inspector-General of Hospitals, as lieutenant-colonel, according to the date of his commission; and, after five years' full-pay service as Deputy Inspector-General, as colonel, according to the date of the completion of such service. Inspector-General of Hospitals, as Brigadier-General, according to the date of his commission, if with an army in the field, or after three years' full-pay service as Inspector-General, as a major-general, from the date of his joining such army in the field, or according to the date of the completion of such service.

17. Such relative rank shall carry with it all precedence and advantages attaching to the rank with which it corresponds [except as regards the presidency of courts-martial, where our will and pleasure is, that the senior combatant officer be always President], and shall regulate the choice of quarters, rates of lodging money, servants, forage, fuel, and

light, or allowanees in their stead, detention, and prize-money. But when a Medieal offieer is serving with a regiment or detachment, the officer commanding, though he be junior in rank to sueh Medical officer, is entitled to a preference in the ehoice of quarters.

18. Medical officers shall be entitled to all the allowances granted by our warrant of 13th July, 1857, on account of wounds and injuries received in aetion, as combatant officers holding the same relative ranks.

19. Their families shall in like manner be entitled to all the allowances granted by our warrant of 15th June, 1855, to the families of combatant officers holding the same relative ranks.

20. Medical officers shall be entitled to field allowances, at home and abroad, at the following rates, subjeet to all the eonditions and restrictions laid down in our warrant of 1st July, 1848 :—

DAILY RATE.

Rank.	Ordinary.	Extra-ordinary.
Regimental.	s. d.	s. d.
Assistant-Surgeon, under Six Years' Service ..	1 0	2 0
,, ,, above Six Years' Service ..	1 6	2 6
Surgeon	2 6	4 6
Surgeon-Major	2 6	4 6
Staff.		
Assistant-Surgeon, under Six Years' Service ..	1 6	2 6
,, ,, above Six Years' Service ..	2 0	3 6
Surgeon	3 0	5 0
Surgeon-Major	3 0	5 0
Deputy Inspector-General, under Three Years' Service..	4 6	7 6
,, ,, ,, above Three Years' Service..	6 0	10 0
Inspector-General of Hospitals	9 0	15 0

21. Surgeons or Surgeons-major of Infantry regiments shall not in future be subject to any diminution of the allowanee of forage, aeeording to the regulations in force, nor to any stoppage out of their daily pay for any ration of hay, straw, or oats supplied for the horse or horses kept by them for the public serviee.

22. All Staff-Surgeons of the first elass and senior Surgeons of Artillery now serving, or who, being now on half-pay, shall hereafter be ealled upon to serve, shall rank as Surgeons-major from the date of their commissions as Staff-Surgeons of the first-class, or Senior Surgeons of Artillery, and shall reeeive the pay of Surgeon-major, according to the foregoing sehedule of full-pay from the date of this warrant, or from the date of being ealled from half-pay to full-pay; and all Surgeons who have already completed twenty years' full-pay service, or upwards, in any rank, shall have the rank and pay of Surgeons-major from the date of this warrant.

23. Medical officers shall be held entitled to the same honours as other offieers of our army of equal relative rank.(a)

24. A Medieal offieer, retiring after a full-pay service of twenty-five years and upwards, may, if recommended for the same by the head of his department, receive a step of honorary rank, but without any consequent inerease of half-pay.

25. Good service pensions shall be awarded to the most meritorious Medical offieers of our army under such regulations as shall be from time to time determined by us, with the advice of our Seeretary of State for War.

26. Six of the most meritorious Medical officers of the Army shall be named My Honorary Physicians, and six My Honorary Surgeons.

HER MAJESTY'S INDIAN FORCES.

Special Examinations for admission into the Medical Department of the Indian Army have for some time ceased. All eandidates enter the army now for general service.

NAVY MEDICAL DEPARTMENT.

Director-General of the Medical Department of the Royal Navy.—Sir John Liddell, Kt., M.D., C.B., F.R.S.

REGULATIONS FOR CANDIDATES FOR THE OFFICE OF ASSISTANT-SURGEON IN THE ROYAL NAVY.

Admiralty, March 1, 1859.

The Right Honourable the Lords Commissioners of the Admiralty are pleased to direct that the following Regulations, relative to the Examination of Candidates for the Appointment of Assistant-Surgeon in the Royal Navy, shall in future be adopted :—

That a Candidate for entry into the Royal Navy shall make a written applieation to that effeet, addressed to the Seeretary of the Admiralty; on the receipt of whieh applieation he will be furnished with the Regulations, and a printed form, to be filled up by him, to show if he possesses the required qualifications.

As vacancies occur, the number of candidates required will be ordered to attend at the Admiralty Office, bringing with them the requisite certifieates, showing that they are fully qualified by age, professional ability, etc., when they will be examined by a Board of Medical Officers, to be named by their Lordships.

Sueh candidates as shall have been found in all respects competent for the appointment of Assistant Surgeon, will be forthwith nominated to one of the Naval Hospitals at home, to await appointments to any of Her Majesty's ships; or should their serviees not be immediately required, their names will be duly registered for early appointments, as vacancies may oeeur.

That no person be admitted as an Assistant-Surgeon in the Royal Navy, who shall not produce a certifieate of being registered under the Medical Act, and a diploma from one of the Royal Colleges of Surgeons of England, Edinburgh, or Dublin, from the Faculty of Physieians and Surgeons, of Glasgow, from Trinity College, Dublin, or from other Corporate Body legally entitled to grant a Diploma in Surgery; nor as a Surgeon, unless he shall produee a certifieate from one of the said Colleges, Faculty, or Corporate Body, founded on an examination to be passed subsequent to his appointment of Assistant-Surgeon, as to his fitness for the situation of Surgeon in the Navy; and in every ease the person producing sueh diploma and certifieate shall also undergo a further examination, touching his qualifieations in all the necessary branches and points of Medieine and Surgery, both at the time of his entry, and after serving three years to render himself eligible for Surgeon; and that previously to the admission of Assistant-Surgeons into the Navy, it will be required that they produce proof of having received a preliminary elassical edueation, and that they possess, in particular, a competent knowledge of Latin; also

That they are of good moral character; the certifieate of which must be signed by the clergyman of the parish, or by a magistrate of the district.

That they have served an apprentieeship, or have been engaged for not less than six months in praetieal pharmaey.

That their age be not less than twenty years, or more than twenty-six years.

That they have actually attended a recognised Hospital for eighteen months subsequently to the age of eighteen, in whieh Hospital the average number of patients is not less than one hundred.

That they have been engaged in actual dissections of the human body twelve months; the certifieate of which from the teacher, must state the number of subjects or parts dissected by the candidate.

That they have attended Lectures, etc., on the following subjects, at established schools of eminence, by Physicians or Surgeons of the recognised Colleges of Physieians and Surgeons, in the United Kingdom, for periods not less than hereunder stated; observing, however, that such Lectures will not be admitted if the teacher shall lecture on more than one branch of science, or if the Lectures on Anatomy, Surgery, and Medieine, be not attended during Winter Sessions of six months each :—Anatomy, 18 months; or General Anatomy 12 months, and Comparative Anatomy 6 months. General Surgery 12 months, or Military Surgery 6 months, and General Surgery 6 months. Theory of Medicine, 6 months, Practice of Medicine, 6 months; if the Lectures on the Theory and Practiee of Medicine be given in eonjunction, then the period required is 12 months. Clinieal Lectures (at an Hospital as above), 12 months; on the Practice of Medicine 6 months, on the Practice of Surgery 6 months. Chemistry, 6 months; or Leetures on Chemistry 3 months, and Practical Chemistry 3 months. Materia Medica, 6 months. Midwifery, 6 months; accompanied by certifieates stating the number of Midwifery cases personally attended. Botany, 3 months.

(a) This clause does not extend to the compliments to be paid by Garrison or Regimental Guards as laid down in pages 29 and 30 of the Queen's Regulations for the Army.

In addition to the tickets for the lectures, certificates must be produced from the Professors, etc., by whom the lectures were given, stating the periods (in months) actually attended by the candidates. The time also of actual attendance at an Hospital or Infirmary must be certified; and the tickets, as well as certificates of attendance, age, moral character, etc., must be produced by the candidate previously to his examination.

Although the above are the only qualifications which are absolutely required in candidates for the appointment of Assistant-Surgeon, a favourable consideration will be given to the cases of those who have obtained the degree of M.D. at either of the Universities of Oxford, Cambridge, Edinburgh, Dublin, Glasgow, London, or Aberdeen; or who, by possessing a knowledge of the diseases of the eye, and of any branch of science connected with the Profession, such as Medical Jurisprudence, Natural History, Natural Philosophy, etc., appear to be more peculiarly eligible for admission into the service, observing, however, that lectures on these or any other subjects cannot be admitted as compensating for any deficiency in those required by the Regulations.

By the rules of the service, no Assistant-Surgeon can be promoted to the rank of Surgeon until he shall have served five years (two years of which must be in a ship actually employed at sea), and can produce a certificate from one of the before-mentioned Colleges, Faculty, or Corporate Body; and it is resolved, that not any certificate of examination from any of the aforesaid Institutions shall be admitted toward the qualification for Surgeon, unless the certificate shall be obtained on an examination passed after a period of not less than three years' actual service; observing, that no one can be admitted to an examination for Surgeon, unless, as hereinbefore mentioned, he can produce a certificate, together with the most satisfactory proof, that he has performed, on the dead body, under the superintendence of a professor or teacher of known eminence, all the capital operations of Surgery, and is perfectly competent to perform any operation with skill and dexterity, and thoroughly acquainted with the anatomy of the parts involved in such operation; without which qualification no one hereafter can be promoted to the higher branches of the service; and whenever Assistant-Surgeons already in the service (whose professional education may not be in accordance with the above) obtain leave to study previously to their passing for Surgeon, they will be required on their examination, to produce testimonials of their having availed themselves of the period of leave to complete their education agreeably to these regulations generally.

It is also to be observed, that Candidates who may be admitted into the Naval Medical Service, must serve in whatever ships, etc., they may be appointed to; and that in the event of their being unable to do so from sea-sickness, their names cannot be continued on the Navy Medical List, nor can they, of course, be allowed half-pay.

The following are the regulations as to pay, half-pay, rank, etc., of Naval Medical officers, issued by the Admiralty on the 30th of May, 1859:—

Her Majesty having been pleased, by Her Order in Council of the 13th instant, to establish the following regulations with regard to the pay, half-pay, rank, etc., of the Medical officers of the Royal Navy, My Lords hereby make known the same, for the information of all whom it may concern.

1. There shall in future be four grades of Medical officers, viz.:—(1.) Inspector-General of Hospitals and Fleets. (2.) Deputy Inspector-General of Hospitals and Fleets. (3.) Surgeon, who after twenty years' service on full pay, ten of which in the rank of Surgeon, shall be styled Staff-Surgeon. (4.) Assistant-Surgeon.

2. No Candidate shall be admitted to the examination for a commission in the Medical Department of the Royal Navy who does not possess such a diploma as would qualify a civilian to practise Medicine and Surgery; and no such Candidate shall receive a commission as Assistant-Surgeon, until he shall have satisfactorily passed an examination in Naval Surgery and Hygiene before a Board of Examiners appointed by the Lords Commissioners of the Admiralty.

3. No Assistant-Surgeon shall be eligible for promotion to the rank of Surgeon, until he shall have passed such examination as the Lords Commissioners of the Admiralty may require; and shall have served on full-pay, with the commission of Assistant-Surgeon, for five years, of which two, at least, shall have been passed on board one or more of Her Majesty's sea-going ships.

4. No Surgeon shall be eligible for promotion to the rank of Deputy Inspector-General of Hospitals and Fleets, until he shall have served ten years in the Royal Navy, on full-pay, of which three, at least must have been passed in one of Her Majesty's ships, on some one or more foreign stations, with the rank of Surgeon.

5. No Deputy Inspector-General of Hospitals and Fleets shall be eligible for promotion to the rank of Inspector-General, until he shall have served five years at home, or three years abroad, in the rank of Deputy Inspector-General. In cases of emergency, however, or when the good of Her Majesty's Service may render such alteration desirable, it will be competent for the Lords Commissioners of the Admiralty to shorten the several periods of service above-mentioned, in such manner as they shall deem fit and expedient.

6. The rates of full-pay for the Medical officers of the Royal Navy will in future be in accordance with the following Schedule:—

Rank.	After 30 years' Service on Full-pay.	After 25 years' Service on Full-pay.	After 20 years' Service on Full-pay.	After 15 years' Service on Full-pay.	After 10 years' Service on Full-pay.	After 5 years' Service on Full-pay.	Under 5 years' Service on Full-pay.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Inspector-General of Hospitals and Fleets	2 5 0	2 5 0	*2 0 0	..	..	..	..
Deputy Inspector-General of Hospitals and Fleets	1 14 0	1 10 0	*1 8 0	..	..	..	..
Staff Surgeon ..	..	1 5 0	1 2 0	..	..	..	..
Surgeon	..	..	..	0 18 0	*0 15 0	..	..
Assistant-Surgeon	..	..	..	..	0 13 0	0 11 6	0 10 0

7. Every Medical officer on the active list, now on half-pay, and those who may be placed on half-pay subsequently to the 13th instant, will be allowed the half-pay to which his period of service on full-pay shall entitle him, according to the following Schedule:—

Rank.	After 30 years' Service on Full-pay.	After 25 years' Service on Full-pay.	After 20 years' Service on Full-pay.	After 15 years' Service on Full-pay.	After 10 years' Service on Full-pay.	After 5 years' Service on Full-pay.	Under 5 years' Service on Full-pay.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Inspector-General of Hospitals and Fleets	1 17 6	1 13 6	*1 10 0	..	..	..	..
Deputy Inspector-General of Hospitals and Fleets	1 5 6	1 2 6	*1 1 0	..	..	..	..
Staff Surgeon ..	..	0 18 6	0 16 6	..	..	..	..
Surgeon	..	..	..	0 13 6	*0 11 0	..	..
Assistant-Surgeon	..	..	..	..	0 10 0	0 8 0	0 6 0

* Or on promotion, should these periods of Service not have been already completed.

8. With a view to maintain the efficiency of the service, all Medical officers, with the ranks of Staff-Surgeon, Surgeon, and Assistant-Surgeon, will be placed on the retired list when they shall have attained the age of 60 years. Deputy Inspectors-General will be placed on such retired list when they shall have attained the age of 65 years, and Inspectors-General when they shall have attained the age of 70 years. Officers thus superannuated will receive the rates of half-pay mentioned in the preceding Schedule.

9. The relative ranks of the Medical officers of the Royal Navy will be as follows:—An Assistant-Surgeon will rank as a Lieutenant in the Army, according to the date of his commission, and after six years' service on full-pay as a Captain in the Army, according to the date of the completion of such service. A Surgeon will rank as Major in the Army, according to the date of his commission, and a Staff-Surgeon as Lieutenant-Colonel, but junior of that rank. A Deputy

Inspector-General of Hospitals and Fleets will rank as Lieutenant-Colonel, according to the date of his commission, and after five years' service on full-pay as Deputy Inspector-General, will rank as Colonel, according to the date of completion of such service. An Inspector-General of Hospitals and Fleets will rank as Brigadier-General, according to the date of his commission, and after three years' service on full-pay as Inspector-General will rank as Major-General, according to the date of completion of such service. Provided always, that no Medical officer, while borne on the books of one of Her Majesty's ships or employed in establishments on shore, shall be deemed superior in rank to the officer appointed to command such ship or establishment; but such commanding officer shall under all circumstances, be held to be superior in rank and precedence to every officer under his command.

10. When Medical officers of the Navy may be employed on shore, on joint service with Her Majesty's Land Forces, such relative rank will carry with it all precedence and advantages attaching to the rank with which it corresponds, and shall regulate the choice of quarters, rates of lodging-money, servants, forage, fuel, and light, or allowances in their stead; but Medical officers serving in the fleet, notwithstanding the relative rank thus conferred upon them, will, in all such details, and also in all matters relating to the duties of the fleet and to the discipline and interior economy of Her Majesty's ships, be subject, as heretofore, to the authority of any executive officer of the Military branch, while on duty, under the general regulations which may from time to time be prescribed by the Lords Commissioners of the Admiralty.

11. Medical officers will share prize money according to the proclamation or proclamations which may be in force at the time being, for regulating the distribution of the proceeds of prizes in the Royal Navy.

12. Medical officers will be entitled to the same allowances on account of wounds and injuries received in action as combatant officers holding the same relative ranks.

13. The families of Medical officers will in like manner be entitled to the same allowances as granted to the families of combatant officers holding the same relative ranks.

14. Medical officers will be held entitled to the same honours as other officers of the Royal Navy of equal relative rank.

15. A Medical officer retiring, after a full-pay service of twenty-five years, may, in cases of distinguished service, receive a step of honorary rank, but without increase of half-pay.

16. Good service pensions will be awarded to the most meritorious Medical officers of the Royal Navy, under such regulations as shall from time to time be determined upon.

17. Four of the most meritorious Medical officers of the Royal Navy will be named "Honorary Physicians," and four "Honorary Surgeons," to Her Majesty.

RULES AND REGULATIONS

OF

THE EXAMINING MEDICAL BODIES IN SCOTLAND.

UNIVERSITY OF EDINBURGH.

I. Three Medical Degrees are conferred by the University of Edinburgh, viz., Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.) The Degree of Master in Surgery is not conferred on any person who does not also at the same time obtain the Degree of Bachelor of Medicine.

II. The preliminary branches of Extra-Professional Education are English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and the proficiency of students in these branches is ascertained by examination, as far as possible, prior to the commencement of their Medical study.

III. No candidate is admitted to a Professional Examination who has not passed a satisfactory examination on at least two of the following subjects, in addition to the subjects mentioned above:—Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy; and the examination on these latter subjects also takes place, as far as possible, before the candidate has entered on his Medical curriculum.

The Examinations under Sections 2 and 3 are conducted by Examiners in Arts, together with some of the Medical Examiners.

IV. A Degree in Arts (not being an Honorary Degree) in any one of the Universities of England, Scotland, or Ireland, or in any Colonial or Foreign University, specially recognised for this purpose by the University Court, exempts from all Preliminary Examination.

V. No one is admitted to the Degree of Bachelor of Medicine or Master in Surgery who has not been engaged in Medical and Surgical study for four years,—the Medical Session of each year, or *Annus Medicus*, being constituted by at least two courses of not less than 100 lectures each, or by one such course, and two courses of not less than fifty lectures each; with the exception of the Clinical Courses, in which Lectures are to be given at least twice a-week during the prescribed periods.

VI. Every candidate for the Degrees of M.B. and C.M. must give sufficient evidence by certificates:—

1. That he has studied each of the following departments of Medical Science, during courses including not less than 100 lectures, viz.:—Anatomy, Chemistry, Materia Medica, Insitutes of Medicine or Physiology, Practice of Medicine, Surgery, Midwifery, and the Diseases peculiar to Women and Children; two courses of Midwifery, of three months each, being reckoned equivalent to a six months' Course, provided different departments of Obstetric Medicine be taught in each of the Courses, and General Pathology, or in schools where there is no such Course, a three months' Course of Lectures on Morbid Anatomy, together with a supplementary Course of Practice of Medicine, or Clinical Medicine, Practical Anatomy, six months, Practical Chemistry, three months; Practical Midwifery, three months at a Midwifery Hospital, or a certificate of attendance on six cases from a Registered Medical Practitioner; Clinical Medicine and Clinical Surgery, during Courses of six months, or two Courses of three months; Lectures being given at least twice a-week; Medical Jurisprudence, Botany, and Natural History, including Zoology, during Courses including not less than fifty Lectures.

2. That he has attended, for at least two years, the Medical and Surgical Practice of a General Hospital which accommodates not fewer than eighty patients, and possesses a distinct Staff of Physicians and Surgeons.

3. That he has been engaged, for at least three months, by Apprenticeship or otherwise, in compounding and dispensing drugs at the laboratory of an Hospital, Dispensary, Member of a Surgical College or Faculty, Licentiate of the London or Dublin Society of Apothecaries, or a Member of the Pharmaceutical Society of Great Britain.

4. That he has attended, for at least six months, by Apprenticeship or otherwise, the Out-practice of an Hospital, or the Practice of a Dispensary, Physician, Surgeon, or Member of the London or Dublin Society of Apothecaries.

VII. The studies of candidates for the Degree of Bachelor of Medicine and Master in Surgery are subject to the following Regulations:—

1. One of the four years of Medical and Surgical study, required by Section 5, must be in the University of Edinburgh.

2. Another of such four years of Medical and Surgical study must be either in the University of Edinburgh, or in some other University entitled to give the Degree of Doctor of Medicine.

3. Attendance during, at least, six winter months on the Medical or Surgical Practice of a General Hospital, which accommodates at least eighty patients, and during the same period, on a Course of Practical Anatomy, may be reckoned as one of such four years, and to that extent shall be held equivalent to one year's attendance on Courses of Lectures, as above prescribed.

4. One year's attendance on the Lectures of Teachers of Medicine in the Hospital Schools of London, or in the School of the College of Surgeons in Dublin, or of such Teachers of Medicine in Edinburgh, or elsewhere, as shall from time to time be recognised by the University Court, may be reckoned

as one of such four years, and to that extent shall be held as attendance on Courses of Lectures, as above prescribed.

5. Candidates may, to the extent of four of the Departments of Medical study required by Section 6, sub-section 1, attend in such year or years of their Medical and Surgical studies, as may be most convenient to them, the Lectures of the Teachers of Medicine specified in the foregoing sub-section 4.

6. All candidates, not students of the University, availing themselves of the permission to attend the Lectures of Extra-Academical Teachers in Edinburgh must, at the commencement of each year of such attendance, enrol their names in a book to be kept by the University for that purpose, paying a fee of the same amount as the Matriculation Fee paid by students of the University, and having, in respect of such payment, a right to the use of the library of the University.

7. The fee for attendance on the Lectures of an Extra-Academical Teacher in Edinburgh, with a view to graduation, must be of the same amount as that exigible by Medical Professors in the University.

VIII. Every Candidate must deliver, before the thirty-first day of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine—(1.) A Declaration, in his own handwriting, that he has completed his twenty-first year; and that he will not be, on the day of graduation, under articles of Apprenticeship to any Surgeon or other master:—(2.) A statement of his Studies, as well in Literature and Philosophy as in Medicine, accompanied with proper Certificates:—(3.) A Thesis composed by himself, to be approved by the Medical Faculty.

IX. Each Candidate is examined, both in writing and *vivâ voce*,—first, on Chemistry, Botany, and Natural History; secondly, on Anatomy, Institutes of Medicine, and Surgery; and, thirdly, on Materia Medica, Pathology, Practice of Medicine, Clinical Medicine, Clinical Surgery, Midwifery, and Medical Jurisprudence. The Examinations on Anatomy, Chemistry, Institutes of Medicine, Botany, and Natural History are conducted, as far as possible, by Demonstrations of objects placed before the Candidates; and those on Medicine and Surgery in part by Clinical Demonstrations in the Hospital.

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XVIII. The Degree of Doctor of Medicine may be conferred on any Candidate who has obtained the Degree of Bachelor of Medicine, and is of the age of twenty-four years, and has been engaged, subsequently to his having received the Degree of Bachelor of Medicine, for at least Two Years in attendance on an Hospital, or in the Military or Naval Medical Services, or in Medical and Surgical Practice: provided always, that the Degree of Doctor of Medicine shall not be conferred on any person, unless he be a Graduate in Arts of one of the Universities of England, Scotland, or Ireland, or of such other Universities as are above specified, or unless he shall, before or at the time of his obtaining the Degree of Bachelor of Medicine, or within three years thereafter, have passed a satisfactory Examination in Greek, and in Logic or Moral Philosophy, and in one at least of the following subjects, namely, French, German, Higher Mathematics, and Natural Philosophy.

XIX. The Medical Examiners of all Candidates for Graduation in Medicine are the Professors in the Faculty of Medicine, and, in addition, three persons appointed annually by the University Court.

XX. The Provisions of these Statutes came into operation on February 4, 1861.

XXI. Persons who began their Medical Studies before February 4, 1861, are entitled to graduate under the system in force before or after that date, according as they may comply with the regulations in force in the University before or after that date.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

President.—Dr. Alexander Wood.
Secretary.—Dr. Rutherford Haldane.

REGULATIONS RELATING TO ADMISSION TO THE FELLOWSHIP.

Fellows.—No one can be elected a Fellow of the College till he has obtained the degree of Doctor of Medicine. Graduates of Foreign Universities must previously submit to an examination before the Examiners of the College.

Non-resident Fellows.—The mode of election of a Non-resident is the same as that of a Resident Fellow. In his petition he engages, if he come to reside in Edinburgh, to fulfil the whole conditions which the College does or may require of Resident Fellows; but another ballot must take place before he is admitted to that grade by the College. The fees for a Resident Fellowship amount to £88, and for a Non-resident to the same sum, both inclusive of the stamp duty to Government.

Licentiates.—Graduates of British Universities may be admitted Licentiates without any previous trial or examination; and all applicants for the licenee, with the exception of Graduates of British Universities, are required to appear before the Examiners of the College, and to pass the prescribed Examination.

The stamp-duty on the diploma having been remitted, the fee payable by Licentiates is now £10 10s.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

REGULATIONS TO BE OBSERVED BY CANDIDATES FOR THE DIPLOMA.

PROFESSIONAL EDUCATION.

1. Candidates commencing Professional study after October 1, 1861, must have been engaged in Professional study during four years, which shall include not less than four winter sessions', or three winter and two summer sessions' attendance at a recognised Medical School (a).

2. The Candidate must have attended the following separate and distinct Courses of Lectures:—

Anatomy, 2 Courses (b), six months each. Practical Anatomy, twelve months. Chemistry, 1 course, six months. Practical or Analytical Chemistry, 1 course, three months. Materia Medica, 1 course, three months. Physiology, not less than fifty lectures (c). Practice of Medicine, 1 course, six months. Clinical Medicine, six months (d). Principles and Practice of Surgery, 1 course, six months. Clinical Surgery, 1 course, six month (d). In addition to the above courses of Surgery and Clinical Surgery, one course of either of these at the option of the Student, 1 course, six months (d). Midwifery and Diseases of Women and Children, 1 course, three months. Medical Jurisprudence, 1 course, three months. Besides the above-mentioned Courses of Lectures, the candidate must have attended at least six cases of labour under the superintendence of a qualified Medical Practitioner, either in a recognised Maternity Hospital, or in a Dispensary where Midwifery cases are admitted, or in private practice; and must produce a certificate to that effect from the Practitioner under whom he attended. He must also have attended, for three months, a course of instruction in Practical Pharmacy, at the Laboratory of an Apothecary, or of a Member of the Pharmaceutical Society of Great Britain, or of a Chemist and Druggist recognized by the College on special application, or of a public Hospital or Dispensary; or as assistant to a Registered Practitioner who dispenses medicines to his own patients.

3. The candidate must have attended, for twenty-four months, a public General Hospital, containing at an average at least eighty patients. He must also have attended, for six months, the practice of a Public Dispensary specially recognised by the College; or have been engaged for six months as Visiting Assistant to a Registered Practitioner.

4. A certificate of three months' instruction in Pathological Anatomy at the post-mortem room of a recognised Hospital, will be required from candidates commencing Professional study after October 1, 1861.

5. A Certificate of Proficiency in Vaccination, signed by a

(a) Candidates who commenced their Professional studies prior to October 1, 1861, are entitled to be admitted to examination after four winter sessions', or three winter and two summer sessions' attendance at a recognised Medical School.

(b) The two Courses must not be simultaneous.

(c) In those Schools of England and Ireland in which two separate Courses of Lectures are delivered at separate hours, one on Anatomy the other on Anatomy and Physiology, the former of these Courses will be received as one of the two Courses of Anatomy required by the College, and the other as the Course of Physiology.

(d) Two Courses of Clinical Medicine of three months each, if not simultaneous, will be held equivalent to one Course of six months. They must be attended during the period of attendance at the Hospital where they are delivered. The same rules will apply to Clinical Surgery.

Registered Practitioner, will be required of every candidate (e).

6. The six months' Courses delivered in Scotland must consist of not fewer than 100 lectures, with the exception of Clinical Medicine and Clinical Surgery. The three-months' Courses must consist of not fewer than fifty lectures.

7. The following order of study is recommended as a guide to the Student, though not enjoined:—First year: Anatomy, Practical Anatomy, Chemistry, Practical or Analytical Chemistry, Hospital. Second year: Anatomy, Practical Anatomy, Physiology, Surgery, Materia Medica (the last either in this or the third year), Hospital. Third year: Practice of Physic, Clinical Surgery, Practical Anatomy, Practical Pharmacy, Pathological Anatomy, Hospital. Fourth year: Surgery or Clinical Surgery, Midwifery and the Diseases of Women and Children, Clinical Medicine, Medical Jurisprudence, Practical Midwifery, Hospital.

8. It is strongly recommended to Students to avail themselves of any opportunities which they may possess of attending Lectures on Ophthalmic and Mental Diseases; also on Botany, Zoology, Comparative Anatomy, and the use of the Microscope, in addition to the Courses of Lectures which are absolutely required.

REGISTRATION.

1. A book shall be kept in the Hall of the College for the Registration of all Medical Students who may apply. In this book all Edinburgh Students who desire to possess the Diploma of the College must be registered, whether they attend Professors in the University or other qualified teachers.

2. No Student beginning Professional study after September, 1861, can be registered who has not passed the Preliminary Examination in General Education of the College, or one of the equivalent Examinations.

PRELIMINARY EXAMINATION IN GENERAL EDUCATION.

1. Candidates commencing their Professional Studies after October 1, 1861, must satisfy the Examiners in General Education that they have a competent knowledge of the following branches of study:—1. English—Composition and Writing to Dictation. 2. Latin. 3. Arithmetic—To Vulgar and Decimal Fractions, inclusive. 4 and 5. Any two of the following, at the option of the candidate: (1) Algebra; (2) Geometry—Euclid, Books I., II., and III.; (3) Natural Philosophy; (4) Greek; (5) French; (6) German; (7) Botany; (8) Zoology. Candidates are requested on giving in their names for the Examination to mention which two of the optional subjects they have selected. The College will, from time to time, fix on books as guides for preparation for Examination in the preliminary branches, and intending Candidates will be furnished with lists of these on application.

2. Testimonials of proficiency granted by certain Educational Bodies, shall be accepted as sufficient evidence of general education, and shall exempt from the Preliminary Examination.

3. After September, 1861, all Candidates for the Diploma of the College must pass the Examination in General Education before they commence their Professional studies. The time of commencing Professional study is understood to be the time of commencing study at a Medical School.

4. Candidates who commenced their Professional studies before October 1, 1861, may pass the Preliminary Examination in General Education at any period previous to the first Professional Examination.

PROFESSIONAL EXAMINATIONS FOR THE DIPLOMA OF THE COLLEGE.

1. Candidates for the Diploma of the College shall be subjected to two Professional Examinations, to be conducted at separate sittings, partly in writing and partly orally.

FEES.

1. For the Diploma of the College, £10.

2. For a Certificate of Qualification to act as Assistant Surgeon in the Navy, when no previous qualification has been received from the College, £5 5s.

3. For a Certificate to an Assistant-Surgeon of the Royal Navy of Qualification to act as full Surgeon, £5 5s.

(e) By a regulation of the Privy Council, of date December 1, 1859, no one can be appointed as a Contractor for Vaccination under the English Poor-law, who does not produce a certificate of proficiency in Vaccination from a person authorized by the Privy Council to grant the same. Dr. Husband, F.R.C.S., Edinburgh, of the Royal Public Dispensary, has been appointed by the Privy Council as Certificator in Edinburgh.

UNIVERSITY OF ABERDEEN.

The Registration of Medical Students is, like the other bodies, arranged agreeably the resolution of the General Council.

The Regulations for granting Medical Degrees are framed in conformity with an Ordinance of the Universities' (Scotland) Commissioners, dated March 16, 1861, and approved by Her Majesty in Council.

The following are the Degrees in Medicine granted by this University, namely, Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.).

DEGREES OF M.B. AND C.M.—PRELIMINARY EXAMINATIONS.

Every Candidate for the Degrees of M.B. and C.M. will require to have passed, before entering on his Professional Curriculum, an Examination in English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics. This Examination is that referred to as the Examination to be passed prior to Registration.

No Candidate shall be admitted to a Professional Examination who has not passed a satisfactory examination on at least two of the following subjects, in addition to the subjects mentioned above:—Greek, French, German, Higher Mathematics, Natural Philosophy, Natural History, Logic, or Moral Philosophy. It is recommended that this additional Examination also be undergone before the Student has begun his Medical Studies.

A Degree in Arts of any of the Universities of the United Kingdom, or of any other University specially recognised by the University Court, shall exempt students from all extra-Professional Examination.

The Professional Curriculum being in conformity with the ordinances of the Scottish Universities' Commissioners, is the same as that of the Universities of Edinburgh, Glasgow, and St. Andrews.

The Studies of Candidates for the Degrees of Bachelor of Medicine and Master in Surgery, are subject to other regulations, which may be obtained by application to Professor Ogilvie, Secretary to the Medical Faculty.

DEGREE OF M.D.

The Degree of Doctor of Medicine may be conferred on any Candidate who has obtained the Degree of Bachelor of Medicine, and is of the age of twenty-four years, and has been engaged, subsequently to his having received the degree of M.B., for two years, in attendance on an Hospital, or in the Military or Naval Medical Service, or in Medical or Surgical Practice: provided always that the Degree of Doctor of Medicine shall not be conferred on any person, unless he be a Graduate in Arts, or unless he shall, before or at the time of his obtaining the Degree of Bachelor of Medicine, or within Three Years thereafter, have passed a satisfactory Examination in Greek, and in Logic or Moral Philosophy, and in one at least of the following subjects, namely, French, German, Higher Mathematics, Natural Philosophy, and Natural History.

EXEMPTION FROM THE FOREGOING REGULATIONS.

Students who shall have begun their Medical Studies before the first Tuesday of November, 1861, will be entitled to Graduate under the Regulations applicable to Medical Students in force before that date.

UNIVERSITY OF ST. ANDREWS.

REGULATIONS OF THE SENATUS ACADEMICUS, RESPECTING THE EDUCATION OF CANDIDATES FOR THE DEGREE OF DOCTOR OF MEDICINE.

I. Every candidate for a diploma in Medicine, upon presenting himself for examination, shall produce satisfactory evidence—1. Of unexceptionable moral character. 2. Of having had a liberal and classical education. 3. Of having completed the twenty-second year of his age.

II. Fellows, Members and Licentiates of the Royal Colleges of Surgeons of England, Edinburgh, and Dublin—of the Royal College of Physicians of London—of the Faculty of Physicians and Surgeons of Glasgow—and of the London Apothecaries' Company—are eligible as Candidates for the Degree of Doctor of Medicine, on producing their Diploma or Licence.

III. Candidates not holding any of the qualifications

enumerated in the above clause, must produce satisfactory proof that they have regularly attended lectures delivered by Professors in some University, or by Fellows of the Royal Colleges of Physicians or Surgeons of London, Edinburgh, or Dublin, for four complete Winter Sessions, or for three Winter and three Summer Sessions, on the following branches :—

1. Anatomy, two courses of six months each. 2. Practical Anatomy or Dissections, twelve months. 3. Physiology, one course of six months. 4. Chemistry, one course of six months. 5. Practical Chemistry, one course of three months. 6. Botany, one course of three months. 7. Natural History or Comparative Anatomy, one course of three months. 8. Materia Medica and Pharmacy, one course of three months. 9. Midwifery and Diseases of Women and Children, one course of three months. 10. Medical Jurisprudence, one course of three months. 11. Surgery, one course of six months. 12. Clinical Surgery, one course of six months. 13. Practice of Medicine, one course of six months. 14. Clinical Medicine, one course of six months. And that they have diligently attended, for at least two entire years, the Medical Practice in some Public Hospital in Great Britain or Ireland, containing not less than one hundred beds, and having a regular establishment of Physicians, as well as Surgeons.

N.B.—After the close of the year 1862, no one will be eligible as a candidate for a Medical Degree who has not studied for two Winter Sessions at one of the English or Scottish Universities, or at Trinity College, or one of the Queen's Colleges, Ireland, or at King's College, or University College, London.

REGULATIONS RESPECTING THE EXAMINATIONS.

The Examinations take place three times in the year, commencing on the first Monday in May, the last Monday in September, and on the 27th of December. The graduation fee is twenty-five guineas. In the event of a candidate being found unqualified, he shall forfeit one-third of the graduation fee; which, however, will be accounted for to him when he passes his examination at a subsequent trial.

The examination by printed papers extends over three days, after which each candidate is submitted to an oral examination.

All candidates are required to give a written translation of a passage from the first four books of Celsus, to write prescriptions in Latin with accuracy, and to be so far acquainted with Greek as to be able to give the meanings of scientific and Medical terms derived from that language.

During the first two days of the examination, the candidates answer printed questions on (1) Chemistry and Materia Medica; (2) Anatomy and Physiology; (3) The Practice of Medicine; (4) The Principles of Surgery and Midwifery. On the third day they are required to write a short commentary on a Medical and on a Surgical or Midwifery case.

Candidates who have acquitted themselves creditably in the first two days' examination are allowed to compete for honours.

Candidates for honours are additionally examined in Comparative Anatomy and Physiology, in the higher departments of Human Physiology and Pathology, and in Medical Jurisprudence; and their practical knowledge of Medicine is tested at the bedside.

UNIVERSITY OF GLASGOW.

Three Degrees in Medicine are granted by this University, which are respectively designated as follows, viz. :—Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.) These Degrees are conferred by this University according to the following Regulations :—

DEGREES OF BACHELOR OF MEDICINE AND MASTER IN SURGERY.

General Education.—1. Candidates for these Degrees are required to pass an examination in the following branches, viz. :—English, Latin, Arithmetic, the Elements of Mathematics and the Elements of Mechanics. The proficiency of Students in these branches shall be ascertained by examination, as far as possible, prior to the commencement of their Professional Education. 2. Candidates are also required, previous to their First Professional Examination, to pass an examination in at least two of the following subjects, selected by the Candidate, viz. :—Greek, French, German, Higher Mathematics, Natural Philosophy, Natural History, Logic, Moral Philosophy: and this examination shall also take place, as far as possible, before the Candidate has entered upon his Medical Curriculum. 4. A Degree in Arts (not being an honorary Degree) of any of the Universities of England, Scotland, and Ireland, or a Degree in Arts of any Colonial or Foreign University, which may for this purpose have been specially recognised by the University Court, shall exempt Candidates from Examination in General Education.

Professional Education.—1. Candidates shall have been engaged in Professional Study for a period of four years; the Medical Session of each year, or *Annus Medicus*, being constituted by attendance on at least two Courses of not less than one hundred Lectures each, or on one such Course and two Courses of not less than fifty Lectures each: excepting in the case of the Clinical Courses, in which it shall be sufficient that the Lectures be given twice a week during the prescribed period. 2. Of the four years constituting the Curriculum, one at least shall have been passed in the University of Glasgow, and another either in that University or some other University entitled to give Degrees in Medicine. For the remaining years, if not passed at a recognised University, attendance during at least six winter months on the Medical and Surgical Practice of a General Hospital which accommodates at least eighty patients, with a Course of Practical Anatomy during the same period, may be reckoned one *Annus Medicus*; and another such year may be constituted by attendance for the requisite period on the Lectures of Teachers of Medicine in the Hospital Schools of London, or in the School of the College of Surgeons of Dublin, or in such other Schools as may for the purpose be recognised by the University Court, with the consent of the Chancellor of the University. But attendance on Lectures by such Teachers shall not be recognised to the extent of more than four of the departments of Medical Study required for the Curriculum. [The Curriculum being in conformity with the ordinance of the Scottish University Commissioners, is the same as for the Universities of Edinburgh and Aberdeen.]

Age of Candidates.—Every Candidate for the Degree of Bachelor of Medicine must produce a Certificate that, on the day of Graduation, he will have attained the age of twenty-one years.

DEGREE OF MASTER IN SURGERY.

This Degree is conferred only on Candidates who obtain at the same time the Degree of Bachelor of Medicine or have been previously in possession of that Degree.

DEGREE OF DOCTOR OF MEDICINE.

Candidates for the Degree of Doctor of Medicine must produce evidence to the following effect :—1. Of having completed the age of twenty-four years. 2. Of having obtained the Degree of Bachelor of Medicine. 3. Of possessing a Degree in Arts in accordance with Regulation 4 (given above), or of having, either before or at the time of obtaining the Bachelor's Degree, or within three years thereafter, passed an examination in Greek, in Logic or Moral Philosophy, and in one at least of the following subjects, which the Candidate is at liberty to select, viz. :—French, German, Higher Mathematics, Natural Philosophy, and Natural History. 4. Of having been engaged, after obtaining the Degree of Bachelor of Medicine, for at least two years in attendance on an Hospital, or in the Military or Naval Medical Service, or in Medical and Surgical Practice.

The foregoing Statutes apply to all Candidates who shall commence their Medical Studies on or after October 1, 1861. Candidates who shall have begun their Medical Studies before that date, are entitled to obtain their Degrees according to the Regulations existing at the time when they commenced their Studies.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

Course of Study.—1. Anatomy: Two Six Months' Courses. These must not be simultaneously attended. 2. Practical Anatomy: Twelve Months, in the course of which the whole subject must be dissected. 3. Institutes of Medicine or Physiology: Not less than fifty Lectures. Candidates educated at those Schools in England and Ireland, in which separate Courses of Lectures are delivered on Anatomy, and on Anatomy and Physiology, shall be held to have satisfied this

requirement by attendance on the latter. 4. Chemistry: One Course, Six Months. 5. Practical or Analytical Chemistry: One Three Months' Course. 6. Practice of Medicine: One Six Months' Course. 7. Principles and Practice of Surgery: One Six Months' Course. 8. Clinical Medicine. 9. Clinical Surgery: One Six Months' Course of each, embracing at least two Lectures weekly, which must be attended simultaneously with attendance on the practice of the corresponding department of the Hospital at which they are delivered. 10. Materia Medica: One Three Months' Course. 11. Medical Jurisprudence: One Three Months' Course. 12. Midwifery and the Diseases of Women and Children: One Three Months' Course. 13. Practical Midwifery: Attendance on at least Six Cases of Labour in a Maternity Hospital, or under the Superintendence of a Registered Practitioner. 14. Practical Pharmacy: Three Months' Practical Instruction in the Laboratory of an Hospital or Dispensary, or in that of a Surgeon or Apothecary, or of a Member of the Pharmaceutical Society, or of a Chemist and Druggist, recognised by the Faculty upon special application. 15. Pathological Anatomy or General Pathology at the post-mortem room of a recognised Hospital: Three Months' Course (this Course shall not be required of those who may have commenced their Course of Study prior to 1860). 16. Hospital and Dispensary Practice: Twenty-four Months' Attendance on the Practice of a Public General Hospital, containing on an average at least eighty patients; and also Six Months' Attendance on the Practice of a Public Dispensary specially recognised by the Faculty.

Candidates for the Diploma of the Faculty must produce evidence by certificates of being 21 years of age, and of good moral character.

Candidates commencing Professional study after October 1, 1861, must have been engaged in Professional study during four years, which shall include not less than four Winter Sessions, or three Winter and two Summer Sessions' attendance at a recognised Medical School.

The examination for the Diploma is divided into two parts. Anatomy, Physiology, and Chemistry are the subjects of the first division of the examination, and shall take place not sooner than the end of the second Winter Session. The second examination embraces all the other subjects of the course. The first examination is conducted six times in each year—viz., on November 6, 1861, February 5, 1862, April 16, 1862, May 7, 1862, July 16, 1862, August 6, 1862. The second (and single examination, under the old regulation) takes place on the second Tuesday of each month. The fee for the Diploma is £10—£4 for the first and £6 for the second examination. All class tickets are returned to the candidates; and in the event of their being unsuccessful, the fee is returned, less the sum of £2, which is retained.

By special regulations, candidates who may have been five years in practice and registered under another qualification are exempted from examination in the preliminary and elementary branches of the curriculum. Special examinations may be had upon payment of £4 extra, not returnable in case of rejection.

At present all candidates for the Diploma are required to have a knowledge of Latin and Natural Philosophy. Those now beginning their Professional course will be required to pass a Preliminary Examination, and be registered in terms of the ordinances of the General Medical Council.

All necessary particulars may be obtained on application to the Registrar.

FACULTY OF MEDICINE IN IRELAND.

UNIVERSITIES, COLLEGES, COURSES OF STUDY, DEGREES, AND LICENCES TO PRACTISE.

The following bodies grant one or more degrees or licences to practise Medicine or Surgery, and provide courses of instruction in the Medical sciences:—The University of Dublin grants the degrees of M.B. or Bachelor of Medicine; M.D. or Doctor of Medicine; M.C. or Master of Surgery; also Licences in Medicine (L.M.) and Surgery (L.S.) The Queen's University in Ireland, with its Provincial Colleges at Belfast, Cork, and Galway; this University confers the degree of M.D. The King and Queen's College of Physicians in Ireland, granting a licence and fellowship. This Institution, in connexion with the Medical Faculty of the University of Dublin, constitutes the School of Physic in Ireland. The Royal College of Surgeons in Ireland, which grants letters testimonial qualifying to practise Surgery as a Licentiate, and also confers a Fellowship. Fellows and Licentiates of the Colleges of Physicians and Surgeons may obtain from their respective Colleges a diploma in Midwifery. The Rotunda and Coombe Lying-in Hospitals grant diplomas in Midwifery, which are, however, not recognised under the Medical Act. The Governor and Company of the Apothecaries' Hall of Ireland.

The Medical Session in Ireland commences about the first week in November.

UNIVERSITY OF DUBLIN.

MATRICULATION.

All Students in Medicine and Surgery of the University of Dublin must be matriculated by the Senior Lecturer of Trinity College, for which a fee of five shillings is payable; but no such Student shall be obliged to have his name on the College books, or to attend any of the academical duties of the University, unconnected with the School of Medicine and Surgery, unless he desire to obtain a Licence or Degree in Medicine, or a Licence or Degree in Surgery.

No Student can be admitted for the Winter Courses after November 25.

DEGREES AND LICENCES IN MEDICINE AND SURGERY.

The Act, 21 and 22 Vict., c. 99, recognises as qualifications for Medical and Surgical Practitioners, the Degrees and Licences in Medicine and Surgery granted by the University.

The Degrees are:—1. Bachelor of Medicine; 2. Doctor of Medicine; 3. Master in Surgery.

UNIVERSITY DEGREES.

1. Bachelor in Medicine.—A Candidate for the Degree of Bachelor in Medicine must be a graduate in Arts, and may obtain the Degree of Bachelor in Medicine at the same Commencement as that at which he receives his Degree of B.A., or at any subsequent Commencement, provided the requisite Medical education shall have been completed.

The Medical education of a Bachelor in Medicine is of four years' duration, and comprises attendance on the following courses of Lectures:—

COURSES OF SIX MONTHS' DURATION OR LONGER.

Anatomy and Physiology; Practical Anatomy, with Dissections; Surgery; Chemistry; Materia Medica and Pharmacy; Institutes of Medicine and Pathology; Practice of Medicine; Midwifery.

Clinical Lectures.—Attendance on Sir Patrick Dun's Hospital during nine months, with three consecutive Courses of Clinical Lectures, each of three months' duration. Also nine months' attendance on some general Hospital in Dublin, approved by the Board, in which clinical instruction in Medicine and Surgery is delivered.

COURSES OF THREE MONTHS' DURATION.

Botany.—In the first week of April, and continued during the months of May and June.

Practical Chemistry; Medical Jurisprudence.

Any of the above-named Courses may be attended at any Medical School in Dublin, recognised by the Provost and Senior Fellows; (and three of them, at the discretion of the Candidate, may be attended in the University of Edinburgh), provided the Candidate have kept an *Annus Medicus* in the School of Physic.

Total amount of Fees for the Degree of M.B., £10.

2. Doctor in Medicine.—A Doctor in Medicine must be M.B. of at least three years' standing, or have been qualified to take the degree of M.B. for three years, and must perform exercises for the Degree before the Regius Professor of Physic in accordance with the Rules and Statutes of the University.

Total amount of Fees for this Degree, £12.

3. Master in Surgery.—The Degree of Master in Surgery can only be obtained by Students who are Bachelors of Arts, and who have completed the Professional Curriculum and passed the Examinations required.

The Curriculum is the same as that for the Licentiate in Surgery, as given below, with the addition of one Session of nine months' attendance on an Hospital having at least

twenty beds for cases of fever. A Special Certificate for such attendance will be required.

In addition to the subjects of Examination required for the Licentiate, Candidates for the Degree of Master in Surgery will be examined specially in the following subjects :—Comparative Anatomy ; Medical and Surgical Pathology ; Animal Chemistry ; Ophthalmic Surgery.

Total amount of Fees for the Degree of Ch. M., £10.

LICENCES.

1. Licentiate in Medicine.—The Licence in Medicine may be obtained by such Students of the Senior Freshman, or some higher class, as are matriculated in Medicine, and have completed four years in Medical Studies. The Course necessary for a Licence in Medicine is the same as for the Degree of M.B., with the exception that any general Hospital approved by the Board of Trinity College may be substituted for Sir Patrick Dun's. A fee of £5 is charged on taking the Licence.

2. Licentiate in Surgery.—The Licence in Surgery may be obtained by such Students of the Senior Freshman, or some higher class, as are matriculated in Medicine, and have completed the Professional Curriculum, and passed the required Examinations. Candidates will also be required to perform Surgical operations on the dead subject.

The curriculum extends over a period of four years, and comprises attendance upon the following Courses of Lectures : —Anatomy and Physiology, two courses ; Demonstrations, three courses ; Dissections, three courses ; Theory and Practice of Surgery, two courses ; Practice of Medicine, one course ; Chemistry, one course ; Materia Medica, one course ; Midwifery, one course ; Practical Chemistry, Botany, and Medical Jurisprudence, one course each.

Any of the above-named Courses may be attended at any of the Medical Schools of Dublin recognised by the Board, provided the Candidate has kept an *Annus Medicus* in the School of Physic.

Also attendance for three Sessions, each of nine consecutive months' duration, on the practice of any of the following Hospitals, together with attendance on the Clinical Lectures on Medicine and Surgery there delivered.

1. Richmond, Whitworth, and Hardwicke Hospitals ; 2. Meath Hospital ; 3. Steevens' Hospital ; 4. Jervis-street Infirmary ; 5. City of Dublin Hospital ; 6. Mercer's Hospital ; 7. St. Vincent's Hospital ; 8. Adelaide Hospital.

Of the Courses of Lectures which are of six months' duration, not more than three can be attended during any one Session.

A Fee of £5 is charged on taking the Licence.

THE QUEEN'S UNIVERSITY IN IRELAND,

granting the degree of M.D., is the centre or head of the Queen's Colleges of Belfast, Cork, and Galway, each of which possesses a Faculty of Medicine. The curriculum of Medical study extends over a period of at least four years, and is subdivided into two periods of two years each ; the first period comprises attendance on Chemistry, Botany, and Zoology, Anatomy, and Physiology, Practical Anatomy, Materia Medica, and Pharmacy. The second period comprises attendance on Anatomy and Physiology, Practical Anatomy, Theory and Practice of Surgery, Midwifery and Diseases of Women and Children, Theory and Practice of Medicine, Medical Jurisprudence. Also, during the first period, Practical Chemistry in a recognised laboratory during three months, and the practice during six months of a Medico-Chirurgical Hospital, containing at least sixty beds, together with Clinical Lectures delivered therein. During the second period three months' Practical Midwifery in a recognised Hospital with not less than thirty beds ; three months' Practical Pharmacy ; and eighteen months' practice of a Medico-Chirurgical Hospital, containing at least sixty beds, and in which Clinical Instruction is delivered. At least one-third of the courses of Medical Lectures must be attended in some one of the Queen's Colleges ; the remainder may be taken at the option of the candidate, in any University, College, or School recognised by the Senate of the Queen's University. Candidates are required before graduating to have also attended in one of the Colleges of the Queen's University, Lectures on Natural Philosophy, and on one Modern Language, and to have passed the Matriculation Examination. There are two University Examinations ; one comprising the subjects of study in the first period, the other the subjetts of the second period. Candidates may, if they prefer to do so, pass both these Examinations at the same time. The University Examinations are held twice in each year, in June and September. Further information will be found in the "Queen's University Calendar," or may be obtained by application to the Secretary, Queen's University, Dublin Castle.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

RESPECTING THE EDUCATION, EXAMINATION, AND ADMISSION OF CANDIDATES FOR THE LICENTIATESHIP IN MEDICINE.

Candidates for the Licentiateship in Medicine are required to make application to the College according to the form supplied by the Registrar ; to produce the Treasurer's Certificate of having lodged the Admission Fee, and to produce Certificates of having attended the following Courses for the periods specified :—

Anatomy and Physiology	2 Sessions,
Or, { Anatomy and Physiology .. .. and Institutes of Medicine	1 Session, 1 Session,
Practical Anatomy and Demonstrations ..	2 Sessions,
Chemistry	1 Session,
Operating Chemistry, in a recognised Laboratory	1 Session,
Materia Medica	1 Session,
Botany	1 Session,
Medical Jurisprudence	1 Session,
Practice of Medicine	1 Session,
Practice of Surgery	1 Session,
Midwifery and Diseases of Women and Children, one Course of .. .. .. or two Courses of 3 Months each.	1 Session,
Practical Midwifery in a recognised Hospital	1 Session.

In addition to the above Courses Candidates are required to have attended a Medico-Chirurgical Hospital, in which regular Courses of Clinical Lectures are delivered, together with Clinical Instruction, for twenty-seven months, or such Hospital, for eighteen months, with nine months' attendance on a Medical Hospital, with similar Courses of Clinical Lectures and Clinical Instruction ; the attendance in each case being for not more than nine months in any year, and the attendance on a Medico-Chirurgical Hospital and Medical Hospital not being taken out in the same year.

Candidates who are not personally known to any resident Fellow of the College are required to transmit Testimonials of Character from registered Members of the Medical Profession ; those from Physicians or Surgeons attached to public Hospitals or Infirmaries being preferred.

Students are recommended to divide their course of study into two periods, of two years each ; the first to comprise Anatomy and Physiology, or Institutes of Medicine, Surgery, Chemistry, Botany, and Hospital Attendance ; the second to comprise Practice of Medicine, Materia Medica, Medical Jurisprudence, Midwifery, and Hospital Attendance.

The Candidate is required to present himself for Examination within three months after he has obtained permission to be examined.

The President and Censors examine the Candidates in the presence of the Fellows and Licentiates of the College.

The Examination is divided into two parts :—

First Part.—Anatomy, Physiology, Botany, and Chemistry.

Second Part.—Materia Medica, Practice of Medicine, Medical Jurisprudence, and Midwifery.

Students may be examined in the subjects of the first part at the termination of the first period of study ; or in all the subjects of their education, on the completion of their Medical studies.

Before being admitted to the final Professional Examination, Candidates are required to have passed an Examination in the following subjects of preliminary education :—

In English—English Composition ; in Modern Languages—one French or German author at the option of the Student ; in Greek—Homer's Iliad, first Book ; or Xenophon's Anabasis, first Book ; or Walker's Lucian, first twelve Dialogues, at the option of the Student ; in Latin—Virgil's Æncid, first

and second Books; or Sallust; or first two Books of Cæsar, "De Bello Gallico;" at the option of the Student; in Mathematics—Euclid, first and second Books; Arithmetic, to the end of Decimal Fractions.

Students in Arts of one year's standing, of any University in the United Kingdom requiring Examinations in the first year; Graduates in Medicine or Surgery of any University in Great Britain or Ireland; Licentiates of the Royal College of Physicians of London or Edinburgh; and Licentiates of any Royal College of Surgeons, will be exempted from the Preliminary Examination.

The above regulations respecting Preliminary Examination will not apply to Candidates who have commenced their Professional Education previously to the 1st January, 1861.

Candidates qualified as follows are required to undergo the second part of the Professional Examination only, viz.:—1. Graduates in Medicine of a University in the United Kingdom. 2. Fellows, Members, or Licentiates of either of the Royal Colleges of Physicians of London or Edinbugh, who have been admitted upon Examination. 3. Licentiates in Surgery of three years' standing.

Graduates and Licentiates in Surgery, of less than three years' standing, shall have have to undergo the second day's Examination, to which shall be added such an amount of Botany and Chemistry as the Censors shall deem necessary to test their knowledge to practise Medicine.

If the applicant be a member of an Apothecaries' Company, he must surrender his Certificate as an Apothecary previous to Examination, and, if admitted, must cease to act as such in any part of the United Kingdom.

Every Member of this College who may desire to obtain the Licence in Midwifery will be required to undergo a special Examination, and, if approved, will receive such Licence, and rank as a Practitioner in Midwifery in the authorized Lists of the College.

Candidates for the Licence in Midwifery of this College, who are not Members of the College, will be admitted to Examination for such Licence in Midwifery on the following qualifications:—The Degree or Licence in Medicine or Surgery from any University or College of Physicians or Surgeons in the United Kingdom, together with a Certificate of having attended a six months' course of Lectures on Midwifery, with the attendance for six months at a recognised Lying-in Hospital, or a Certificate of having attended at least twenty cases of labour.

Fee for the Licence, £15 15s., which may be divided as follows:—For Examination at the termination of the first period of Study, £5 5s. For final Examination for the Licence, £10 10s. Fee for the Midwifery Diploma, £2 2s.

The Charter of William and Mary and the Act of the Irish Parliament, 1 Geo. III., cap. xiv., made perpetual by the Act 30 Geo. III., cap. xlv. § 11, confer on the Fellows and Licentiates of the King and Queen's College of Physicians the title of Doctors of Physic.

By the Act 21 and 22 Vict., Fellows and Licentiates in Medicine and Midwifery of this College are entitled to be placed on the Medical Register; and are qualified to practise Physic and to hold appointments as Physicians to Public Institutions in any part of the United Kingdom.

ROYAL COLLEGE OF SURGEONS, IRELAND.

President.—William Jameson.
Vice President.—Thomas L. Mackesy.
Secretary of the College.—Edward Hutton.
Secretary of the Council.—James S. Hughes.

COUNCIL.

James W. Cusack.	Samuel G. Wilmot.
Arthur Jacob.	Auley P. Banon.
Thomas E. Beatty.	Peter Shannon.
William Hargrave.	Hamilton Labatt.
Robert Adams.	Josiah Smyly.
James Barker.	Benj. G. McDowel.
William Colles.	Maurice H. Collis.
Hans Irvine.	Edward Ledwich.
Edward Hutton.	Christopher Fleming.
Robert Pentland.	

Court of Examiners.—R. G. H. Butcher, Jerome Morgan, M. H. Stapleton, B. W. Richardson, Edward A. Stoker, G. H. Porter, T. J. Tufnell.

Examiners in Midwifery.—Robert Johns, Edward Quinan, Henry Croly.

Fellows of the College are Members of the Corporation, and are admitted by examination. Letters testimonial are granted to Licentiates, and a diploma in Midwifery to Fellows and Licentiates educated and examined in that branch of Surgery.

Candidates for the Fellowship must be 25 years of age, and must give proof of liberal preliminary education and good conduct during Professional education. They are required to produce certificates of Surgical studies for six years (three of which must be for exercises in Dublin), and also of practice as House-Surgeon or Dresser in an Hospital; as well as certificates of attendance on Hospitals, lectures, and dissections, as required from Licentiates; with the addition of Botany, Comparative Anatomy, and Natural Philosophy. Fee, £26 5s.; if the candidate be a Licentiate, £10 10s.

Candidates for Letters Testimonial are required to produce certificates of preliminary classical education, of four years' Professional study (three of them in Metropolitan Schools), also three years' attendance on Hospital practice and dissections. Fee, £21.

Candidates for the Midwifery Diploma must be Fellows or Licentiates of the College, are required to produce certificates of attendance on midwifery lectures and practice, with proof of having attended thirty cases of parturition.

Candidates for the Fellowship and Letters Testimonial are publicly examined on two separate days in Anatomy, Physiology, Surgery, Practice of Medicine, and Pharmacy. The examiners are elected by a sworn jury of the Council appointed by lot, teachers being ineligible. Fellows and Licentiates of the College are qualified to practise as Surgeons in any part of the British dominions, and to be appointed Medical officers to the Army and Navy, public Hospitals, Infirmaries, Dispensaries, and Workhouses.

By a new bye-law it is enacted that—"Certificates of attendance on lectures and of the performance of dissections shall be received from professors and lecturers in all Universities, Colleges, and recognised Schools in her Majesty's dominions, as qualifications for the fellowship and letters testimonial of this College; and also certificates of attendance on all Hospitals recognised by the Council, where clinical instruction is given."

APOTHECARIES' HALL OF IRELAND.

Governor.—Charles Holmes, M.D.
Deputy-Governor.—Jerome O'Flaherty, L.R.C.S.I.
The Court of Examiners.—Drs. John Betty, Edward Howard Bolland, Charles Henry Leet, William Madden, sen.; William Madden, jun.; Robert Mulock, Henry P. Nolan, John McMunn, George B. Owens, John Shea, George Wyse, Mr. Jerome O'Flaherty, Mr. Thomas Collins, Mr. Christopher Shaw.
Secretary.—Charles H. Leet, M.D.

REGULATIONS REGARDING THE EDUCATION AND EXAMINATION OF CANDIDATES FOR THE LICENCE TO PRACTISE AS AN APOTHECARY.

Every Candidate shall undergo a Preliminary and a Professional Examination.

Candidates for the Preliminary Examination in Arts (or the Certificate of Apprentice) shall be examined in the following:—In Latin—the Catiline Conspiracy of Sallust, and the first three Books of the Æneid of Virgil; in Greek—the Gospel of St. John, and the first twenty Dialogues of Lucian, or the first two Books of Homer's Iliad; in French—Telemachus, or the History of Charles XII.; in Science—the first two Books of Euclid, Algebra inclusive of Simple Equations, and Arithmetic to the end of Decimals; and, in English—Composition and Writing to Dictation.

The Certificate of Apprentice entitles its possessor to be registered as a Student of Medicine as soon as he has commenced studies at a Medical School.

Candidates for the Professional Examination (for the Licence to practise as an Apothecary) shall produce Certificates to the following effect:—

1. Of having passed the Preliminary Examination.
2. Of being twenty-one years of age, and of good moral character.

3. Of having served an Apprenticeship, of not less than three years, to a qualified Apothecary in practice.

4. Of having attended the following Courses, viz.—Chemistry, during one Winter Session; Anatomy and Physiology, during two Winter Sessions; Demonstrations and Dissections, during two Winter Sessions; Botany and Natural History, during one Summer Session; Materia Medica and Therapeutics, during one Summer Session; Practical Chemistry, during three months; Principles and Practice of Medicine, during one Winter Session; Midwifery and Diseases of Women and Children, during six months; Practical Midwifery, attendance upon twenty cases; Surgery, during one Winter Session; Medical Jurisprudence, during one Summer Session.

5. Of having attended, at a recognised Hospital or Hospitals in the United Kingdom, the Practice of Medicine, and Clinical Lectures on Medicine during two Winter and two Summer Sessions; also the Practice of Surgery, and Clinical Lectures on Surgery during one of the Winter, and one of the Summer Sessions.

The Examination for the Licence to practise as an Apothecary shall be divided into two parts. It shall be conducted as follows:—

The First Examination.—On Chemistry, Botany, Anatomy, Physiology, Materia Medica, Therapeutics, and Pharmacy.

This Examination shall be principally experimental and demonstrative; the Candidate shall also translate Latin Prescriptions into English.

The Second or Final Examination.—On Medicine, Surgery (Principles of), Pathology, Midwifery, and Medical Jurisprudence.

This Examination shall be partly written and partly *viva voce*, and shall include the Demonstration of Morbid Preparations and Drawings. The Candidate shall also write Prescriptions in Latin. The First of these Examinations may be undergone at the termination of two years' study; and the Second or Final not before the completion of four years' study. The Licence entitles its possessor to register as a qualified Medical Practitioner under the Medical Act, 1858.

The Governor and Court hold an Examination of Candidates for the Licence to Practise on the first Friday in each month, at three o'clock, in the order in which the names appear on the Roll. The Preliminary Examination of Apprentices in Arts takes place at stated periods, of which public notice shall be given, in the months of April, June, October, and December in each year.

Candidates for the Licence must lodge their Testimonials, and enrol their names and address with the Clerk, at the Hall, in Dublin, a month prior to the day of Examination.

A rejected Candidate cannot be re-admitted to Examination until after the expiration of six months.

Candidates for the Certificate of Assistant to an Apothecary in compounding and dispensing Medicine, must have completed at least three years' apprenticeship with an Apothecary, and must produce indentures to that effect, together with a certificate of good moral character.

The Examination of the intending Assistant will be restricted to Pharmacy, scientific and practical (inclusive of Hydrostatics as applied to Pharmacy), and the history and character of medicines, with their mode of preparation, combination and doses.

An Examination of Apprentices is held at the Hall, in the first week in May annually, upon some subject of Medical Chemistry, which is announced by the Council at the commencement of the previous Winter Session, and a Prize of five guineas is awarded to the successful competitor.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CLINICAL OBSERVATIONS ON TÆNIA.

By Dr. PISSLING.

In this paper Dr. Pissling gives an account of 158 cases of tænia, occurring in the Vienna Hospital practice between the years 1821—41, and observed with exactitude. These consisted of 52 males and 106 females, and of this number 18 males and 71 females were natives of Austria—the badness of the water being assigned as a frequent cause of the occurrence of the disease in Vienna. With respect to age, 10 of the males and 9 of the females were below 15; above 15 and below 35 there were 37 males and 81 females; and above 35 there were 5 males and 12 females. The greatest number of cases were observed in males between the ages of 20 and 30—viz., 22; while in females the greatest number occurred between 20 and 25—viz., 31. Thus, the statistics of these cases observed during the space of twenty years confirms the general opinion as to the greater frequency of the affection in women. The statements of the duration of the affection from the first occurrence of symptoms to that of the only certain one, the passage of portions of the worms, varied exceedingly from a few weeks until several years, but they are little to be relied upon. It is of more interest to know that of 23 cases of relapse the majority (17) occurred between the second and fourth month. In 11 cases the name *tænia solium* was not applicable, as in 6 of these there were two, and in 5 three observed in the same patient. In 6 cases the tænia was associated with *ascaris lumbricoides* and *oxyuris vermicularis*. With respect to the asserted production of tænia in consequence of eating diseased pork, the author observes, that, of these 158 cases, 2 only were persons of the Jewish persuasion, while one of these had lived two years with a butcher and dated her ailment from then. He adds that neither during his Hospital service or in private practice, nor during a residence in Gallicia, although he has seen very many cases of tænia, did he ever meet with one in a Jew. In the history of one of the cases it is stated that the patient had lived a long time with a person who suffered from the disease. In another case the mother of the patient had suffered from it. Two patients dated its commencement from their living at butchers'; and in one instance father, son, and daughter all suffered from tænia. The frequent reiteration in the histories of the cases of the bad effect of the Vienna water in the production of the disease is not entirely in harmony with the views which now prevail as to the origin of the disease.

The author gives a minute analysis of the various symptoms as observed in the males and females, but for this we have not space. He observes, however, that the frequent connexions stated by writers of repute, such as Schönlein, Andral, and Wünderlich, to exist between tænia and various convulsive affections is by no means borne out by the histories of these 158 cases. A public and private practice of eighteen years' duration has failed to exhibit to him any causal connexion between tænia and chorea, epilepsy, or other forms of convulsive disease. The patients were, during the space of time to which this account relates, treated by the now discontinued "Wawruch mode," consisting of an elaborate system of purgation in combination with *filix mas*. By this means 49 males and 91 females were returned as cured.—*Wien Wochenblatt*, Nos. 15 and 16.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, September 12, 1861:—

Nash, Frederic, Royston, Cambridge
Spaull, Barnard Edward, Vale-place, Hammersmith
Tyler, John William, Calcutta.

The following gentleman also on the same day passed his First Examination:—

Elias, Daniel, jun.

APPOINTMENTS.

Chesshire.—Edwin Chesshire, Fell. and M. R.C.S. Eng., L.S.A. Lond., has been appointed President of the Birmingham Medical Benevolent Society for the ensuing year.

Clarkson.—Mr. Josiah Clarkson has been appointed one of the Vice-Presidents of the Birmingham Medical Benevolent Society for the ensuing year.

Clowes.—Francis Clowes, M.R.C.S. Eng, L.S.A., Lond., has been elected to succeed the late William Clowes, M.R.C.S. Eng., L.S.A. Lond, as Medical Officer of the Stalham District in the Tunsted and Happing Hundreds, Norfolk.

CORBET.—David Corbet, M.R.C.S. Eng. L.M., and L.S.A. Lond., has been appointed Medical Officer for the Kingwinford District, No. 2 (called Brierly Hill), in the Stourbridge Union, Worcestershire, vacant by the resignation of William Onions, M.R.C.S. Eng., L.S.A. Lond.

FIXOTT.—John Fixott, M.D., S., and M. Gottingen, M.R.C.S. Eng., L.M. Dub., Surgeon to the 1st or North-West Regiment of the Royal Jersey Militia, has been appointed Deputy Medical Inspector-General of the Royal Jersey Militia.

GOODWORTH.—William Henry Goodworth, of Hatfield, Yorkshire, L.S.A. Lond., has been elected to succeed the late Henry Walker Mirfin, M.R.C.S. Eng,, L.S.A. Lond., as Medical Officer for the Stainforth District of the Thorne Union, Yorkshire.

HILL.—John Daniel Hill M.R.C.S. Eng., who has heretofore filled the office of House Surgeon to the Royal Hospital, Gray's-inn-road, conjointly with George Richard Irvine, M.R.C.S. Eng, has been appointed sole Resident Surgeon to the Hospital, upon the resignation of the latter on being appointed to the Colney Hatch Lunatic Asylum.

LANGWORTHY.—William Froude Langworthy, jun., M.R.C.S. Eng., L.S.A. Lond., has been elected to succeed J. M. B. Langworthy, M.R.C.S. Eng., L.S.A. Lond. (resigned), as Medical Officer of the 4th District (comprising the Parishes of Modbury and Aveton Gifford), of the Kingsbridge Union, Devonshire.

LAWRENCE.—Samuel Aust Lawrence, M.R.C.S. Eng., L.S.A. Lond., has been elected Medical officer for District No. 2 of the South Stoneham Union, Hants, in the room of Edward Vernon Utterson, L.R.C.P. Edin., M.R.C.S. Eng., and L.M., resigned.

LOWE.—Alexander Lowe, Surgeon of the 5th or South West Regiment of the Royal Jersey Militia, has been appointed Medical Inspector General of the Royal Jersey Militia, *vice* George Matthew Jones, L.R.C.S. Edin., M.R.C.S. Eng., deceased.

MEGGET.—Archibald Megget, M.D. Edin., M.R.C.S. Eng., has been elected Medical officer for the Winlaton District, in the Gateshead Union, Durham, in place of Theodore Edgar Dickson Byrne, L R.C.P. Edin., (exam.), M.R.C S. Eng.

MERCER.—J. T. Mercer, M.R.C S. Eng., L.S.A. Lond., has been appointed Resident Medical Officer to the Brixton, Streatham-hill, and Herne-hill Dispensary, in the room of Frederick William Dunne, M.R.C.S. Eng., L S.A., Lond., resigned.

SELWOOD.—Mr. Selwood, M.R.C.S. Eng., has been appointed Assistant House Surgeon to the Royal Free Hospital, Gray's-inn-road.

YATES.—Mr. George Yates has been appointed one of the Vice-Presidents of the Birmingham Medical Benevolent Society for the ensuing year.

DEATHS.

BEVAN.—September 9, very suddenly, John Bartlett Bevan, of Cardigan (in practice prior to 1815), aged 77.

GANNON.—September 11, John Gannon, of No. 15, Wills-terrace, Lorrimore-square, Walworth, M.R.C.S. Eng., L.S.A. Lond., aged 53.

GRIERSON.—September 14, James Grierson, of Beech-hill, Haddingtonshire, formerly of the Hon. E. I. Co.'s Medical Service, on the Bengal Establishment, (Assistant-Surgeon, March 1808; Surgeon, March 1823.)

HACON.—September 14, of disease of the heart, at Aldborough, Aylsham, Norfolk, Mr. Richard Hacon (in practice prior to 1815), aged 68.

MARSHALL.—September 14, Joseph Marshall, of No. 10, Portland-street, Southampton, M.D. Edin,, M.R.C.S. Eng., L.S.A. London., aged 48.

M'DERMOTT.—September 11, at Longwood Avenue, Dublin, William M'Dermott, M.D., Surgeon R.N. (Seniority November 11, 1851.)

RAWLINS.—September 11, William Rawlins, of Alfred-place, Bedford-square, M.D. King's Coll. Aberdeen, aged 71.

SATTERTHWAITE.—September 14, Michael Satterthwaite, of Lindon-grove, near Alderley, M.D., aged 49.

SELLERS.—September 8, John Sellers, of Ingleton, Bentham, Yorkshire (where he had been in practice for the long period of forty-eight years), M.R.C.S. Eng., aged 71.

STEUART.—July 21, at Agra, of cholera, James Frederick Steuart, M.D., Assistant-Surgeon in the Indian Army, attached to the Bhurtpoor Political Agency, aged 28.

NEW MODE FOR THE LOCAL APPLICATION OF CHLOROFORM.—M. Martenot, a French military Surgeon, relates two cases of operation for ingrowing nail, in order to demonstrate his mode of obtaining anæsthesia from the local employment of chloroform. First, pretty firm compression is made at the base of the toe by means of a ligature, and then a thick piece of charpie, soaked in a mixture of chloroform and camphor (20 parts of camphor to 30 of chloroform), is applied for fifteen or twenty minutes, or more, and covered over with a thick piece of linen and some oiled silk, so as to prevent too rapid evaporation. The Surgeon assures himself of the production of the anæsthesia by pricking the toe, and at once proceeds to the operation, which, painful as it usually is, may, by the above procedure, be performed without any suffering.—*Gazette des Hôp.*, No. 92.

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·810 in.
Mean temperature	57·2
Highest point of thermometer	74·3
Lowest point of thermometer	39·2
Mean dew-point temperature	49·9
General direction of wind	S.W.
Whole amount of rain in the week	0·15 in.

Medical Times and Gazette.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, September 14, 1861.

BIRTHS.

Births of Boys, 916; Girls, 879; Total, 1795.
Average of 10 corresponding weeks, 1851-60, 1568·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	565	545	1110
Average of the ten years 1851-60	597·6	591·4	1189·0
Average corrected to increased population	..	..	1137
Deaths of people above 90	..	..	3
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West'	463,373	..	..	2	1	5	6	19
North	618,201	2	1	10	4	10	11	15
Central	378,058	..	3	5	..	6	9	12
East	571,129	2	1	7	3	11	10	34
South	773,160	..	2	24	4	8	17	58
Total	2,803,921	4	7	48	12	40	53	137

APPOINTMENTS FOR THE WEEK.

September 21. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

23. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

24. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

25. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

26. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

27. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Grosvenor-place School of Medicine,

No. 1, GROSVENOR-PLACE (adjoining St. George's Hospital).—SESSION 1861-62.—The INTRODUCTORY LECTURE will be delivered on TUESDAY, October 1, at Three o'clock, p.m., by Dr. FRANCIS WEBB, F.S.A.

WINTER SESSION.

General Anatomy and Physiology—Dr. Richardson.
Descriptive and Surgical Anatomy—Dr. Halford.
Practical Anatomy—Dr. Arlidge.
Chemistry—Mr. T. Bloxam, F.C.S.
Principles and Practice of Medicine—Dr. Leared.
Principles and Practice of Surgery—Mr. Spencer Wells and Mr. William Adams.

General fee to all the Lectures required by the Universities of London and St. Andrews, the Royal College of Surgeons of England, and the Society of Apothecaries, 35 Guineas.

Further information may be obtained of Dr. Richardson, 12, Hinde-street, Manchester-square, W.

King's College, London. — Medical

DEPARTMENT.—The WINTER SESSION will commence on TUESDAY, October 1, with an INTRODUCTORY LECTURE at Eight o'clock, p.m., by Professor BENTLEY, F.L.S.

Anatomy—Professor Richard Partridge, F.R.S.
Physiology, General and Morbid—Professor Beale, M.B.
Chemistry—Professor W. A. Miller, M.D., F.R.S.
Principles and Practice of Medicine—Professor George Budd, M.D.
Principles and Practice of Surgery—Professor William Fergusson.

KING'S COLLEGE HOSPITAL.

Physicians—George Budd, M.D., F.R.S.; George Johnson, M.D.; Lionel S. Beale, M.B., F.R.S.; W. A. Guy, M.B., F.R.S.
Assistant-Physicians—Conway Evans, M.D.; A. B. Duffin, M.D.; E. S. Thompson, M.B.; E. Liveing, M.D.
Physician for Diseases of Women and Children—Arthur Farre, M.D.
Assistant-Physicians—T. H. Tanner, M.D.; A. Meadows, M.D.
Surgeons—W. Fergusson, F.R.S.; Richard Partridge, F.R.S.; William Bowman.
Assistant-Surgeons—J. Wood, F.R.C.S.; J. W. Hulke, F.R.C.S.; H. Smith, F.R.C.S.; P. C. Price, M.R.C.S.

The Hospital is visited daily. Clinical Lectures are given every week. The Physicians' Assistants, Clinical Clerks, the House-Surgeons and Dressers, are selected by examination from the Students.

Warneford Scholarships.—Students who enter the Medical Department of King's College in October, 1861, will have the exclusive privilege of contending for the Scholarships founded by the late Dr. Warneford for the encouragement of the previous education of Medical Students. There will be five of £25 each given this year, two to be held for three years, and three for two years.

The subjects of examination are the usual branches of school education—viz. Divinity, Classics, Mathematics, Modern History, and Foreign Languages, but any subject except Divinity may be omitted.

For full particulars, apply to J. W. Cunningham, Esq., King's College.

Westminster Hospital School of

MEDICINE.—The INTRODUCTORY ADDRESS of the SESSION, 1861-62, will be delivered in the LECTURE THEATRE, by Dr. MARCET, F.R.S., on TUESDAY, October 1, at Eight p.m. After the Address, the Prizes of the past year will be distributed, and a CONVERSAZIONE will be held in the Board-Room of the Hospital.

The Westminster Hospital was Instituted A.D. 1719, and Incorporated by Act of Parliament A.D. 1836. It contains 175 Beds, and affords relief to about 20,000 Out-Patients annually.

HOSPITAL PRACTICE.

Physicians—Dr. Basham, Dr. Fineham, Dr. Radcliffe.
Assistant-Physicians—Dr. Marcet, Dr. Anstie.
Surgeons—Mr. Barnard Holt, Mr. Brooke, Mr. Holthouse.
Assistant-Surgeons—Mr. Hillman, Mr. Power.
Surgeon-Dentist—Mr. Clendon.

LECTURES—WINTER SESSION.

Descriptive and Surgical Anatomy—Mr. Holthouse.
Practical Anatomy—Mr. Heath and Mr. Gray.
Physiology and Physiological Anatomy—Mr. Power.
Chemistry—Dr. Marcet, F.R.S., and Mr. F. Dupré, Ph.D.
Medicine—Dr. Basham.
Surgery—Mr. Barnard Holt and Mr. Brooke, M.A., F.R.S.
Dental Surgery—Mr. Clendon.

SUMMER SESSION.

Botany—Mr. Syme, F.L.S.
Materia Medica and Therapeutics—Dr. Radcliffe.
Forensic Medicine—Dr. Fincham and Dr. Anstie.
Midwifery—Dr. Frederic Bird.
Practical Chemistry—Dr. Marcet, F.R.S., and Mr. F. Dupré, Ph.D.
Comparative Anatomy and Zoology—Mr. Power.
Natural Philosophy—Mr. Brooke, M.A., F.R.S.

Clinical Lectures.—In addition to the instruction given by all the Medical Officers during their visits, Courses of Lectures on Clinical Medicine and Surgery, in accordance with the new Regulations of the Examining Boards, will be delivered during the Winter and Summer Terms by the Physicians and Surgeons.

Clinical Appointments.—The Offices of House-Physician and House-Surgeon are open to competition solely amongst Gentlemen who have been educated at the Hospital, and who are qualified to practise. The appointments are conferred without the payment of any fee, and Board and Lodging are provided in the Hospital, free of expense. The offices are held for one year. Clinical Clerks and Dressers are selected from the most qualified Students, without additional fee.

The entire Course of Study (including Hospital Practice and Lectures) required by the College of Surgeons and the Society of Apothecaries, may be attended on payment of 75 guineas, in two instalments. Perpetual, 80 guineas.

Further information may be obtained on application to Mr. Power, 3, Grosvenor-terrace, Pimlico, or to

F. J. WILSON, Secretary to the Westminster Hospital.

St. Mary's Hospital Medical School.—

The WINTER SESSION will commence on TUESDAY, October 1st, at Eight o'clock, p.m., with an INTRODUCTORY ADDRESS by Mr. SPENCER SMITH, after which a Conversazione will be held in the Museum.

At this Hospital the Medical Appointments are annually conferred upon the Pupils without additional fee. Three Resident Medical Officers are appointed for twelve months, and one, the Obstetric Officer, for six months, all of whom live free of every expense in the Hospital. The advantages of these Appointments far exceed as many Scholarships of Fifty pounds each. There are also four non-Resident Medical Officers, who are appointed for six months.

Physicians—Dr. Alderson, Dr. Chambers, Dr. Sibson, Dr. Handfield Jones, Dr. Sieveking, and Dr. Markham.
Surgeons—Mr. Coulson, Mr. Lane, Mr. Ure, Mr. Spencer Smith, Mr. Walton, and Mr. James Lane.
Physician-Accoucheur—Dr. Tyler Smith.
Ophthalmic Surgeon—Mr. White Cooper.
Aural Surgeon—Mr. Toynbee.
Surgeon-Dentist—Mr. Sercombe.

Lectures.—Clinical Medicine—Dr. Alderson, Dr. Chambers, and Dr. Sibson. Clinical Surgery—Mr. Coulson, Mr. Lane, and Mr. Ure. Medicine—Dr. Chambers and Dr. Sibson. Surgery—Mr. Lane and Mr. Spencer Smith. Physiology and Morbid Anatomy—Mr. James Lane and Dr. Broadbent. Anatomy—Mr. James Lane and Mr. Gascoyen. Operations upon the Dead Body—Mr. Walton. Dissections—Mr. Gascoyen and Mr. Norton. Chemistry—Mr. Field. Dental Surgery—Mr. Sercombe.

Summer Session.—Midwifery—Dr. Tyler Smith and Dr. Graily Hewitt. Materia Medica—Dr. Sieveking. Botany—Dr. Dresser. Medical Jurisprudence—Dr. Sanderson. Practical Chemistry—Mr. Field. Ophthalmic Surgery—Mr. White Cooper. Aural Surgery—Mr. Toynbee. Comparative Anatomy—Dr. Broadbent. Natural Philosophy—Mr. Smalley.

The In-Patients are visited daily by the Medical Officers, and the Out-Patients are also attended daily by the Physicians and Surgeons in charge of them. During the past year relief was afforded to 1686 In-Patients and 14,165 Out-Patients. A Maternity Department is attached to the Hospital.

Students are required to perform the duties of Clinical Clerks and Dressers, in each session, during the last two years of their curriculum.

Prizes, &c.—The Medical Appointments mentioned above. A Scholarship in Anatomy of the annual value of £25. A Prize of £20 for Students of the First Year. Prizes in the several classes at the end of each Session of the average value of Five Guineas. Two Prosectors, who each receive £5 and a Certificate.

The Fee for the Hospital Practice and Lectures required by the Colleges of Physicians and Surgeons and the Society of Apothecaries, is £89 5s., which may be paid by instalments.

A detailed Prospectus will be sent and further information obtained on application to the Dean of the School, who will also furnish the names of Gentlemen in Practice near the Hospital willing to receive Pupils to reside with them. GEO. G. GASCOYEN, Dean of the School.

St. Mary's Hospital, August, 1861.

St. Thomas's Medical Session.—

A GENERAL INTRODUCTORY ADDRESS will be delivered by ALBERT J. BERNAYS, Esq., M.A., Ph.D., Dean, on TUESDAY, October 1, 1861, at Eight o'clock, p.m. After which the Distribution of Prizes, will take place.

Gentlemen have the option of paying £40 for the first year, a similar sum for the second, and £10 for each succeeding year; or £90 at one payment as perpetual.

MATRICULATION PRIZES, &c.

Voluntary Matriculation Examinations are held early in October, and Prizes are given in each of the three following divisions:—

1st. In Mathematics, Classics, and Ancient History. The President's Prize of 20 Guineas.

2nd. In Physics and Natural History. A College Prize of £20.

3rd. In Modern Languages and Modern History. A College Prize of £20.

The WM. TITE SCHOLARSHIP, founded by W. Tite, Esq., M.P., F.R.S., the proceeds of £1000 Consols, tenable for three years, is awarded every third year.

To the Three most distinguished Pupils for General Proficiency in each year, the following Prizes are awarded:—

FIRST YEAR'S STUDENTS.

1st. The Treasurer's Prize of 30 Guineas. 2nd. A College Prize of £20. 3rd. A College Prize of £10.

SECOND YEAR'S STUDENTS.

1st. A College Prize of £30. 2nd. A College Prize of £20. 3rd. A College Prize of £10.

The Dressers, and the Clinical Clerks, are awarded to merit, after examination.

THIRD YEAR'S STUDENTS.

1st. A College Prize of £30. 2nd. A College Prize of £20. 3rd. A College Prize of £10.

Mr. Geo. Vaughan's Cheselden Medal. The Treasurer's Gold Medal.

Mr. Newman Smith's Prize of £5 for the best Essay on "Neuralgia."

The Two House-Surgeons, the Resident Accoucheurs, and the Dressers, are periodically selected, and are provided with Rooms and Commons in the Hospital, free of expense.

Two Hospital Registrars at an Annual Salary of £40 each, or one at £80.

The Committee of the "Nightingale Fund" has arranged with the authorities of St. Thomas's, for educating women as Hospital Nurses, who, on the satisfactory completion of one year's training, will be considered eligible to receive appointments as Nurses in the Metropolitan or Provincial Hospitals.

Prior to Midsummer in each year, applications should be made to Mrs. W. W. Wardroper, at St Thomas's Hospital, either by women as Candidates for training, or by Institutions for Trained Nurses.

The Patients are admitted daily at Half-past Eleven, a.m., and the Out-patients seen at Half-past Twelve daily.

To enter, or to obtain prospectuses, the conditions of the Tite Scholarship, and further information, apply to

Mr. WHITFIELD, Medical Secretary, resident at the Hospital.

ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT

The Grosvenor Place School of Medicine,

DURING THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.,

Surgeon to the Royal Orthopædic and the Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital.

LECTURE II.

(Concluded from page 264.)

Now let us for a moment glance at the different statements which have been made by Physiologists and by authorities on spinal curvature in reference to the

Flexibility in different Regions of the Spinal Column.—Some difference of opinion exists as to the relative degrees of flexibility in the different regions of the spine. Speaking of the relative proportion of the intervertebral cartilage in the different regions of the spine, Professors Quain and Sharpey (a) state that "the dorsal division of the spine has, comparatively with the length, a much smaller proportion, and has accordingly less provision for pliancy than the cervical or lumbar portions of the column." Mr. Skey (b) observes that "nature has given to the region of the loins the greater freedom of motion, because that portion of the body is midway between the head and the feet." Upon this observation Mr. Bishop (c) remarks, "Mr. Skey appears to have entirely mistaken the relative degree of flexion of which the spine is susceptible. . . . . Now, not only has the lumbar region the least power of motion in the whole column, but a greater mobility would have tended to render the movements of the superincumbent part unstable, and a person in such a predicament would be what is vulgarly termed *top-heavy*," and from Weber's very exact measurements of the length, breadth, and thickness of the intervertebral cartilages in the different regions of the spine, Mr. Bishop states, "that under an equal force, the dorsal and lumbar portions of the spine possess very nearly equal degrees of flexibility, and that the cervical portion has nearly three times the flexibility of either the dorsal or the lumbar."

As some explanation of the diversity of opinion on this subject, I would observe that the very marked difference in the relative amount of flexibility in the lateral, and in the antero-posterior directions, in the several regions of the spine to which I have especially directed attention, has not been sufficiently noticed. To me it appears that in the antero-posterior direction, the flexibility is greatest in the lumbar region, but there is no provision whatever for lateral motion in this region—a very important fact when we remember that lateral curvature generally commences in this situation; and that in the lateral direction the flexibility is greatest in the cervical region—a conclusion with which the direction of the articulating surfaces of the so-called "oblique articulating processes" would appear to correspond—whilst in the dorsal region the flexibility in both directions is much more limited.

LIGAMENTS AND MUSCLES OF THE SPINAL COLUMN; THEIR INFLUENCE IN MAINTAINING THE ERECT POSITION OF THE SPINE, AND IN LIMITING AND DIRECTING ITS MOVEMENTS.

As in the preceding observations I have thought it unnecessary to give you any detailed anatomical description of the bones and intervertebral cartilages of the spinal column, from your familiarity with this portion of our subject, and have therefore confined my observations to the mechanical construction and physiology of the spine; so it appears to be unnecessary for me to describe anatomically the ligaments and muscles connected with the spine, and I will, therefore, merely direct your attention to a few of the more important physiological points connected with these structures, having especial reference to the mechanism of motion in the spinal column.

Ligaments of the Spine.—More than a passing observation on the ligaments of the spine would be unnecessary, were it not for the circumstance that writers on spinal curvature, whose position entitles them to consideration, appear to assume the existence of ligaments of which anatomically we have no knowledge, and to attribute to them an influence in the production of lateral curvature of the spine which is wholly imaginary. We are told, for example, by a recognised authority of the present day, that in lateral curvature of the spine, "the ligaments are elongated on the convex side, and contracted on the concave side, offering the most obstinate resistance." What ligaments can possibly be alluded to? I am not aware that any distinct lateral ligaments exist along the bodies of the vertebræ. In this situation there are only some short and irregular ligamentous bands interlacing and crossing over the intervertebral cartilages. We are all familiar with the strong anterior and posterior ligaments which, attached to the bodies of the vertebræ and the intervertebral cartilages, traverse the length of the spinal column—the atlas and dentata excepted; but we have no lateral ligaments such as exist in the moveable articulations of the extremities. We can hardly imagine that the short and dense ligaments connecting the oblique articulating processes are alluded to, since the form and direction of the articular surfaces would render such a change impossible; moreover, I shall hereafter prove to you from dissections, that in all cases of spinal curvature, however slight, these articular surfaces themselves become altered in direction and form, and that such alterations increase in proportion to the severity of the case. The error of this *ligamentous theory* of the production of lateral curvature has been forcibly pointed out by Mr. Skey, who observes,—"Among the immediate or proximate causes of unequal pressure on the spinal column has been assigned, by some Medical authorities, an unhealthy relaxation of the ligaments of the spine, but with no rational explanation; indeed, it is difficult, anatomically speaking, to explain this view on any satisfactory grounds; because, in truth, there are no lateral ligaments of the spine the relaxation of which would throw any light on the disease." (d) It appears to me that the assumption alluded to with respect to the existence and conditions of certain imaginary lateral ligaments of the spine,—an assumption to be found in most of the works on lateral curvature,—is only a part of the more general theory, I might call it the *muscular and ligamentous theory*, of the production of spinal curvature, which assumes a close analogy, and sometimes, as I have shown, an expressed identity, between lateral curvature of the spine and the more simple deformities, affecting the moveable articulations of the extremities, such as knock-knee, etc.; and I have already pointed out the very serious anatomical errors involved in this theory.

Having disposed of this error, then, I would especially remind you that, in the spinal column, as in other parts of the skeleton, the ligaments are placed where they are most required to limit the movements in certain directions. Lateral flexion of the spine in the dorsal and lumbar regions is limited chiefly by the form and direction of the oblique articulating processes, which are made still more firmly to lock the bones together by very strong and short ligamentous bands connecting the margins of the articular facets. As flexion of the spine, however, is more freely permitted in the antero-posterior direction, as in stooping forward or bending backwards, so you at once see why we have placed along the anterior and posterior surfaces of the bodies of the vertebræ the strong ligaments described as the *anterior and posterior common ligaments of the spine*; and also why, posteriorly, the arches of the vertebræ and the spinous processes are connected by very strong ligaments. All these ligamentous structures serve not only to limit the movements of the spine in certain directions, in which motion is less restrained by the form of the bones, but also to

(a) See Quain and Sharpey's Anatomy, Vol. i. page 189.

(b) "On Lateral Curvature of the Spine," page 6. Second Edition. London: Churchill, 1842.

(c) *Op. cit.*, page 36.

(d) "On Lateral Curvature of the Spine," page 16. Second Edition. Churchill. 1842.

economise muscular force in maintaining the equilibrium of the body in any positions we may assume.

Muscles of the Spinal Column.—It appears to be very generally considered by authors on spinal curvature that the erect position of the spinal column is maintained principally by its muscles and ligaments, but especially the muscles, no importance being attached to the form and mechanical construction of the articulations of the spinal column which I have already described, and in virtue of which it is admirably adapted to maintain the erect position with the smallest expenditure of muscular force. The vertebral column appears to be regarded by the authors referred to, as if it consisted of a number of bones placed one above the other, and connected together by free moveable articulations, such as the knee-joint, and other joints of the extremities; and they seem to consider that it is only by the nicest balance of active muscular force that the erect position can be maintained. Now, I have already pointed out the fallacy of comparing the articulations of the vertebræ, to the moveable articulations of the extremities, and have also alluded to the erroneous theory of the production of spinal curvature arising out of such comparison, as well as the statements based upon it as to the simplicity and curability of lateral curvature.

We have seen that in consequence of the pyramidal form of the spinal column, the connexion between the bodies of the vertebræ by the intervertebral cartilages, and the way in which the vertebræ are locked one within the other, by the oblique articulating processes, and retained in direct connexion by ligaments, the stability of the spinal column is insured; and there can be no doubt that in consequence of the anatomical arrangement of this complicated structure, the spinal column is admirably adapted, *per se*, to the maintenance of the erect position of the body with the least possible expenditure of muscular force. If you remove the spine from the body, and dissect off all the muscles, leaving the bones connected only by the ligaments, you will find that it is still a very firm column, not only preserving its erect form with all its natural curves, but that its flexibility in any direction is very limited. How different is this from the knee or hip-joints similarly dissected. I fully concur in the opinion expressed by Mr. Bishop—to whose laborious investigations of the mechanism of motion and the physiology of the spinal column I have repeatedly adverted—that, "in the erect position of the body the ligaments of the spine are in the state of least action, as are also the muscles, because in that position no stretching force is exerted, either on the oblique articulating processes, or on the bodies of the vertebræ, and therefore the ligaments must be in a state of repose;" (e) and again, at page 48, he observes "it will be shown in a subsequent chapter that the erect position of the body is that in which there is the least expenditure of muscular action; it therefore follows that some of the muscles must act at a mechanical disadvantage whenever placed out of this attitude; but, as any constrained attitude is irksome if much prolonged, a transfer of action from one set of muscles to another, is attended with a sensation of ease." The relief afforded by varying the positions of the body, as familiarly illustrated by the military order "Stand at ease!" etc., are then alluded to by Mr. Bishop. The great object in the mechanical and physiological construction of the human skeleton, of maintaining the erect position of the body with the least expenditure of muscular force, is largely contributed to by the anatomical mechanism of the spinal column, and is still further assisted by the way in which the head—which it is the special object of the spinal column to support—is connected with the spine. In Quain and Sharpey's Anatomy (f), the observation is quoted from Mr. Lawrence (g) that "The condyles, or points of articulation of the head are situated very near the centre of its base, being, however, a little nearer to the occipital protuberance, than to the anterior surface of the jaws; by this arrangement very little active power is required to maintain it *in equilibrio*." Hence no necessity exists in the human subject for the *ligamentum nuchæ* placed in the lower animals to economise muscular force in maintaining the position of the pendent head. The general principle of economising muscular force in the erect position of the body, is to be traced not only in the spinal column, where it is most conspicuous, and the muscular force required is reduced to its minimum, but also in the mechanism of the moveable articulations of the extremities, as in the knee and hip-joints; in the spinal column it is clearly evidenced by the large size and form of the articular surfaces of the bodies of the vertebræ; but in the knee and hip-joints a very much larger expenditure of muscular force must be required in maintaining the erect position of the body, and, indeed, in these articulations, the maximum of muscular force, in comparison with the other articulations of the body, is required. To compare these articulations, then, physiologically and pathologically, in explaining the causes and mode of production of lateral curvature of the spine, as some writers on spinal curvature have done, appears to me to be an error requiring but little reflection to correct.

The difference in the relative amount of muscular force required to hold the spine erect, and to maintain the erect position of the body at the moveable articulations of the extremities, we frequently see illustrated in the inability of patients recovering from fevers, etc., to stand, long after they have been able to sit up in bed. I well remember a patient recovering from a severe attack of scarlet fever, who had sat up in bed for several days, and feeling himself so much stronger said, "Now I am sure I could walk across the room," and though advised not to do it, he proceeded to make the attempt, and instantly fell to the ground; the muscles of the lower extremities being too weak to maintain the moveable joints of the knees and hips in the erect position; and I need hardly say it was some time before he made another experiment.

The muscles of the spine, then, are in a state of the least action when the spinal column is in the erect position. Instead therefore of the muscles of the spine in the erect position being in a state of *active tension* as assumed by some writers, it would be more correct to describe them as in a state of *vigilant repose*, ready on the instant to check and limit the flexion of the spine when its balance is disturbed, and thus assist in preserving the general equilibrium of the body in any of the various attitudes, such as the dancer or the gymnast may assume. As soon, however, as the equilibrium of the spinal column is disturbed, and the body inclined to one side, the spinal muscles on the convexity of the curve are called into increased action, and put violently on the stretch; they become tense and prominent, while the muscles in the concavity of the curve remain soft and flaccid. The latter circumstance is practically well worthy of remark, and appears to me to prove that *the spine is not drawn* into a curved position by the active contraction of muscles in the same way that the arm or the leg is flexed when the biceps and hamstring muscles respectively become prominent and tense; but that the spine bends passively as a flexible column, in consequence of disturbance of its equilibrium, the result either of some alteration in the angle of its base of support—some tilting of the pelvis—or of some alteration in the distribution of the weight it has to support above—a bending of the head, or the uplifting of one arm, etc.

I wish now, especially, to draw your attention to the fact that when the body is inclined to one side in any gymnastic movement, and the spine bent laterally as far as this motion is permitted, the muscles in the concavity of the spinal curvature are flaccid and relaxed, while those on the convexity are tense and prominent; because in lateral curvature of the spine, when established as a morbid condition, the same appearance presents itself, and in the explanations of this affection given by various authorities, such as—active muscular contraction—a spasmodic condition of the muscles—excessive use of the muscles of one arm and of one side of the spine—hypertrophy of muscles, etc.—the tension and prominence of the muscles on the convexity of the curve appears to have been frequently mistaken for the cause, instead of being recognised as the effect of the curvature. There can be no doubt that the muscles on the convexity of the curvature do exert their utmost power to restore the equilibrium, and, failing in this, to prevent further increase of the curvature, but I have not been able to satisfy myself either that lateral flexion of the spinal column is a healthy condition, or that lateral curvature of the spine as a morbid affection, is ever produced by any active muscular contraction, and in another Lecture I shall hope to offer you a much more satisfactory explanation of the production of this affection.

(e) *Op. cit.*, page 37.

(f) *Op. cit.*, page 97.

(g) "On the Characters of the Human Head."

Some exception to this general statement may perhaps be taken in respect of the lateral curvature of the spine consequent upon wry-neck, which we know in many cases is produced by active or spastic contraction of the sterno-mastoid muscle; but the exception is rather apparent than real, the spinal curvature being a secondary and late effect of wry-neck, and depending at least as much upon the mechanical conditions as the physiological causes of this affection. At the time we see spinal curvature co-existing with wry-neck, there is no evidence of active spastic contraction of the sterno-mastoid muscle which is generally about an inch or an inch and a-half shorter than the opposite muscle, and may be made tense and prominent in certain movements of the head, but is not constantly in a state of tension like the muscles of the leg or arm, in deformities we characterize as spasmodic.

Again, in the class of cases occasionally met with, in which we see permanent spinal curvature resulting from the long continuance of hysterical contraction of the scapula muscles, by which the scapula is drawn up two or three inches higher than the opposite bone, the same reasoning as to the mode of production of the spinal curvature will apply. In such cases if the trapezius, levator anguli scapulæ, rhomboid muscles, etc., of the right shoulder be affected, the spine will not be drawn into a curve on this side, so that the contracted muscles remain in the concavity, but the convexity of the curve will be on the right side, and a second compensating curve will be formed to the opposite side in the lower dorsal and lumbar regions. Such a curvature I have seen remain as a permanent condition some years after the local muscular affection had entirely ceased, and the raised scapula restored to its natural position. Moreover, it must be remembered that my present observations have reference to the ordinary form of lateral curvature of the spine, and that the spinal curvature consecutive to wry-neck, hysterical muscular contraction, as well as that which we frequently see depending upon caries of the spine and other causes, cannot be considered as belonging to this class.

It is also true that in certain morbid conditions under which spinal irritation is produced, as in tetanus and in poisoning by strychnine, the spinal column is curved backwards and drawn into an arch, the concavity of which is directed backwards by the violent contraction of the posterior spinal muscles; and there can be no doubt that in some of the most powerful and prolonged muscular efforts made by the gymnast, especially in those movements in which a weight has to be raised while the body is in a bent position, and then balanced while the spine is curved backwards; or in which the spine is curved backwards and the body inclined, so that the head is made to approach the heels, *the spine is drawn* into this curved position by the active contraction of the spinal muscles; but still it appears to me that in the ordinary positions which we all frequently assume, and even in the attitudes generally assumed by dancers and gymnasts, the spinal column bends, not by any muscular contraction, or muscular force, but simply by disturbance of its equilibrium in consequence either of some alteration in the inclination of its moveable base taking place from the hip-joints, or from some inclination of the head and consequent alteration in the distribution of its weight.

It appears then, to be sufficiently proved that the spinal muscles are in the state of least activity in the erect position of the spinal column, and are called actively into play only when the equilibrium of the spinal column is disturbed, and then that under ordinary circumstances, only those muscles on the convexity of the curve are called into play; hence, it would appear that the functions of the spinal muscles are not to produce by active contraction any flexion or curvature of the spine, but essentially to regulate and limit the movements of the spine, and to restore the equilibrium of the spinal column when disturbed. This power of muscular resistance—at once limiting curvature of the spine from mere flexibility under mechanical influences, and fixing the spinal column when its equilibrium is disturbed—enables the gymnast either to preserve the general equilibrium of the body, and balance the trunk between the moveable articulations above and below it, in any fantastic attitudes he may assume, or in the still more constrained and painfully remarkable positions in which all equilibrium is destroyed, and both trunk and legs are placed at a right angle to a pole held in a perpendicular direction, this muscular power enables him to maintain such a position for a short time.

The importance of the views I have now endeavoured to explain of the ordinary action of the spinal muscles will appear in a subsequent Lecture, when we discuss what may be termed *the muscular and ligamentous theory* of the production of lateral curvature of the spine, and also *the muscular or gymnastic theory* of the cure of this affection.

ORIGINAL COMMUNICATIONS.

REMARKS ON ARSENIOUS ACID IN LARGE DOSES IN FEVERS AS A SUBSTITUTE FOR QUININE.

By J. TURNER.

During an extended period of twenty years' practice in the employment of arsenious acid (a remedy of long repute) in the treatment of intermittent, and more recently of remittent and other fevers, and viewing with interest the anxiety now prevailing in reference to the excessive drain on the cinchona tree and recent failure (a) to render it indigenous to Indian soil, I make no apology for the bold avowal that experience has led me to the conclusion that arsenious acid possesses as great, or even greater, specific influence, if such a synonym can be permitted, over these diseases, so prevalent in and fatal to our armies in the East, than the alkaloid quinine; neither am I, I conceive, over-confident in asserting that its exhibition in the large requisite doses is not attended with greater risk or danger(b) to the patient, nor is a greater amount of caution necessary than with its more costly rival, for I have given ɱxx. of the liq. potassæ arsenitis within ten hours, repeating the same amount the following day with success, in a case of obstinate quotidian intermittent, to an infant of nine months' old, without the slightest gastric or other irritation supervening.

When in Medical charge of the Honourable Company's steam frigate *Nemesis* in China, during the war with that Empire in the years 1841-42, especially during the operations in the Yang-tze-keang, or Yellow River, and when lying off the city of Nankin, fevers, together with other diseases, prevailed to an alarming extent, and here I first tested the power of Fowler's solution in larger doses than usually recommended; and although I regret my inability at this date to produce records illustrative of the success of my treatment, yet so satisfied was I with the result, that when the subject of the excessive and increasing expenditure of quinine(c) became a topic for serious financial contemplation, I again determined to resort to a repetition, and my reports from Sindh, a country notorious for the virulence of its fevers, for the years 1851, 1852, and 1853 to the Medical Board, were most favourable, as the following extracts from my Hospital records will show:—

"No. 1 (1851).—Some cases of fevers (hepatic) have been treated, after relieving stomach and bowels, with liq. potassæ arsenitis, which I find in these complicated affections *preferable* to quinine."

"No. 2 (1852).—I have given a fair trial to quinine in ℈j. doses, and also, with an equally successful issue, to liq. potassæ arsenitis. Have found the tertian type less easy to manage than the quotidian." ℈j., sometimes followed by gr. x. dose when fevers are intense, is more effective and less extravagant than the more frequent finikin doses; and which latter mode of treatment in India not unfrequently leads to the transport of the patient to some distant sanatorium, and for the reason—"He can't shake off the fever."

"No. 3 (1852).—The fever cases have been treated chiefly with ɱxxv. doses of liq. potassæ arsenitis, neither gastric nor other irritation supervening. I consider this remedy an excellent substitute for the more costly quinine."

(a) Later accounts give a more favourable report.

(b) Arsenious acid enjoys this advantage over quinine, in not producing the distressing cerebral disturbance so common after administering the latter.

(c) For the three Presidencies of Bengal, Madras, and Bombay, the public expenditure of late years on this one drug reached the enormous sum of £50,000 annually.

"No. 4 (1852).—During the months of November and December, consequent on the entire expenditure of the arsenical solution, I have treated fever cases with a ℈j. dose of quinine; but for the month of January, 1853, liq. potassæ arsenitis has been employed almost to the exclusion of quinine, and with very satisfactory results, both in the European Horse Artillery and Native Artillery Hospitals."

On my recall from Sindh to Poona, in 1853, to assume the more responsible charge of the Head-quarters Horse Brigade of Artillery, the following minute I find subscribed to my report for the year 1859:—"I would not again have recourse to the large doses of quinine in fevers till satisfied of the inefficacy of the liq. potassæ arsenitis in even larger doses than the ʒss. every second hour to four or five, or even six." Subsequently, and till my departure on furlough in March last, I rarely prescribed quinine.

Other official memoranda may be added, yet the above, I think, should suffice.

The subject matter of the above treatment was first prominently brought to the notice of the Director-General Medical Department, Bombay, embodied in a letter addressed to the Superintending Surgeon Poona Division of the Army, accompanied by notes and diaries of cases, in April, 1860, and in this officer's official communication forwarding them he remarks, at paragraph 3:—"On personally examining the patients who had taken Fowler's solution to the extent of ʒij. within six hours, I satisfied myself that these doses (ʒss) had not produced any unpleasant results or even disagreeable sensations."

The Director-General in his reply writes:—"Mr. Turner should be thanked for drawing attention to his successful treatment of intermittent fevers by large doses of arsenic, and steps should be taken, by circular, to urge an extended trial of this remedy, and reports requested." Hence my second report, dated Poona, January 1, 1861, in which my views were stated to have undergone no change, but had rather gathered increased strength with reference to this powerful antiperiodic, not only in fevers and neuralgia periodica, but I suggested whether its exhibition in similarly large doses would not be also advantageous in undue uterine secretions. I had also strengthened the opinion previously formed, that no greater caution was requisite in administering the arsenious acid than with quinine, though of course some limit must be put on the duration of its daily continuance, especially when prescribed in small doses, as with calomel, etc.

The largest quantity of the arsenical solution I have ever given, and longest continuance of administration, was an equivalent to gr. xix. of arsenious acid in twenty-eight days. The subject of this treatment was a strongly-built, full-blooded recruit, about twenty-two years old, and only a few months in India, who had suffered some days previously, when on the line of march, and very shortly after admission became typhoid. When the case of this man was brought to the notice of the Superintending Surgeon, Dr. Stovell, during his visit, he was taking ʒiij. of the solution during an interval of ten hours, and I intimated my intention to increase the quantity, but was reminded by this officer that the case was one "calling loudly for quinine," yet my patient took not a grain.

In the above instance not the slightest gastric or intestinal irritation was present throughout, the man having been watched by my Apothecary and attendants day and night. The following is the form of prescription I have usually adopted:—℞ Liq. potassæ arsenitis, tinct. cardam. comp., āā, ʒss.; Mucilag. g. acaciæ, ʒiij.; mist. camph. ʒss. M.; to be given every second hour to four or five times, the last to anticipate the expected paroxysm at least two hours,—the plan experience had taught me in administering quinine. When giving Fowler's solution I recommend, as much as possible, a resistance to taking more fluids than absolutely necessary immediately after.

Although the object of this paper is to endeavour to bring more prominently to notice the value of arsenic in large doses as a safe substitute for quinine in fevers, nevertheless, I have taken the liberty to attach one diary showing its tonic power also in neuralgia, which I treat similarly.

Dr. Morehead, late Superintending Surgeon, in the second edition of his valuable work, pages 32 and 33, refers to the subject under six heads, being the result of his clinical experience, confessing, however, to such having been limited to gr.ss. of arsenious acid in the intermission; but goes on to state "the practical question remains, whether in intermittents in India, uncomplicated with gastric or intestinal irritation, arsenic can be given with safety to the extent of gr.jss. and upwards . . . and thus suffice for the cure of all cases?" I think I may venture to assert, and without presumption, that my experience has solved Dr. Morehead's "practical question." Yes! arsenious acid can be given to gr.jss. and upwards, in fevers and other periodic affections, with perfect safety and success.

R. G., gunner in the Bombay Horse Artillery, age 34, in India seven years.

December 11, 1860.—Subject of frequent attacks when in the lines, usually about 10 a.m., at which hour rigors appeared this morning, lasting nearly one hour, followed by pyrexia, etc. Tongue loaded; bowels torpid. ℞ Zinci sulphatis, ℈j., aquæ ʒiij. M. pro emetico. Postea, ℞ Pulv. jalap. co. ʒj., Hyd. chlorid. gr. v. M. Vespere—Emetic dislodged a quantity of bile. Jalap rejected. Some dryness of skin. ℞ Hyd. chlorid., p. ant. comp. āā. gr. iv., h. s. s. Spoon diet.

12th.—Slept very well. Bowels freely relieved during night. ℞ Quinæ gr. iij. 3tiis hôris. Vespere—Rigors half an hour later.

13th.—Slept pretty well. Cont. quinæ ut hôri. Vespere—Rigors at usual hour.

14th.—℞ Liq. potassæ arsenit. ʒss. to be given at 4, 6, and 8 a.m. Vespere—No recurrence after ʒjss. in four hours. No unpleasant symptoms.

15th.—Rather restless night. Cont. ad. ♏v. 3tiis hôris. Half-diet.

17th.—Quite well. In this case time was allowed for eliminatory treatment and tonic doses of quinine, which failed. Patient has not returned.

P. R. (Volunteer H.M. 57th Regiment) gunner, Bombay Horse Artillery, age 26, in India eighteen months.

October 30, 1859.—First attack of rigors on the 28th, when in barracks, at 11½ a.m.; had had four previous attacks when at Ahmednuggur with his old regiment, always at the same hour, every other day. Appeared at the same time this forenoon. Tongue loaded, bowels torpid. Treat with zinc emetic ℈j., and jalap purge. Vespere—Stomach relieved, but an enema was necessary to assist the purge. ℞ Hyd. chlorid. gr. v, p. ant. co. gr. iv. M. H. s. s.; spoon diet.

31st.—℞ Quinæ disulph. gr. iij. 3tiis. hôris. Vespere—Tongue still coated; thirst; skin moist.

November 1.—This is the fever-day. ℞ Liq. potass. arsenit. ♏xv. at 4, 6, 8, and 10 a.m. Vespere—Apyrexia. Half-diet.

5th.—Discharged. Quinine given merely as tonic on 31st.

23rd.—This is again his third attack of similar type (out of Hospital) at 11 a.m., very severe. Great irritability of stomach. Emetic and purge as above. Spoon diet.

24th.—Vomiting has ceased. ℞ Inf. cherettæ ʒj., acid nit. ♏iij., hydroch. ♏ij., M., three times.

25th.—Cont. haust. Vespere.—Rigors 11 a.m., severe.

27th.—Repeat liq. pot. arsenit. (as on November 1) and at 12 merid. Vespere—After ʒj. and ♏xv. Apyrexia. Five doses = ʒj. and ♏xv.

29th.—Quite well. One trial day (25th) allowed, to observe if paroxysm would appear without the antiperiodic. Half-diet.

C. L., gunner in the Bombay Horse Artillery, age 22; in India three years.

December 19, 1859.—On 17th and 18th attacked by rigors, etc. at noon, and again to-day at the same hour. Came to Hospital in the hot stage. Rigors last about an hour or more. Sulph. zinc emetic, followed by calomel and antimonial powder, h. s., and mercurial purge in the morning. Spoon diet.

20th.—Vespere—Stomach relieved of bile after emetic, and bowels freely moved to-day. Rigors did not appear till 4 p.m., delayed probably by the emetic and purge.

21st.—℞ Liq. potass. arsenit. ʒss., mucilag. g. acaciæ, ʒiv., tinct. cardam. co. ʒj. M., to be given at 6½, 8½, and 10½ a.m., and 12·30 p.m. Vespere—Rigors in full force at noon and after ʒjss.; afternoon dose not given; only three doses given.

22nd.—Repeat liq. pot. arsenit. 4½, 6½, 8½, and 10½ a.m. on empty stomach. Vespere—No recurrence. Slight vomiting after first dose, not so with subsequent doses. In this case ʒij were taken within six hours. Half-diet.

29th.—Tonic doses were subsequently given, and patient convalesced rapidly, and has not since returned.

Miss R., aged 17. Disease, Neuralgia. Date, June 15, 1860.

Strumous diathesis; normal height; usually enjoys good health. The subject of neuralgia periodica since June 8. Attacks usually between 8 and 9 a.m., confined to right temporal and temporal portion of parietal bones, accompanied by a burning sensation and profuse lachrymation from right eye, and lasting several hours. Secretions *said* to be normal, but, on subsequent inquiry, I find catamenia always profuse, yet no sensible debility resulting. In June, 1857, when at Bombay, had similar attacks daily, lasting six days, when ice and other local remedies were resorted to, and with benefit. Four days subsequently to this, catamenia appeared for the first time.

June 11.—My Apothecary, Mr. Kinlock, was consulted at this date, and the following prescribed—℞ Pulv. rhei. co. ʒj. statim. Local remedies: Ext. belladonna and hot salt. Paroxysm passed off towards evening.

12th.—Bowels being freely relieved grs. iij. quinine were given at 5, 6, 7, and 8 a.m. to quinism. Return of paroxysm at 9.30 a.m., continuing till evening, as on last three daily attacks.

13th.—Repeat quinine to quinism, as yesterday. Paroxysm came on at noon, passed off, and again returned very severely at 9 p. m.

14th.—Repeat quinine as above. Paroxysm at 8½ a.m. of greater severity than on former occasions. Cold application resorted to. No relief till evening.

15th.—On this date I was requested to see the patient, and arrived just as the paroxysm was about to commence (8½ a.m.) Suffers frightful agony; other symptoms as above recorded. Pulse but slightly increased; no hardness; skin normal; bowels torpid. To have two cathartic and calomel pills, and be kept quiet. Passed off towards evening as usual.

16th.—Bowels relieved by pills. ℞ Liq. potass. arsenitis, tinct. card. comp., āā, ʒss.; aquæ, ʒss.; M., to be given at 3, 5, and 7 a.m., in anticipation. Second dose rejected; third retained. Paroxysm returned at 8½ a.m. No treatment after.

17th.—Solution to be repeated at 2½, 4½, and 6½ a.m. No return of paroxysm; no nausea. Vespere—Is quite well. Generous diet.

July 17.—Paroxysm at 8½ a.m. Has enjoyed unusually good health during the last month; catamenia, which ceased four days ago, had been abundant. Repeat solution of arsenic, as on June 17, to-morrow.

18th.—No nausea after the ʒjss. No return of paroxysm. Vespere—Is quite well.

December 31.—To this date no return of neuralgia. Has been treated with preparations of iron, and allowed a generous diet, together with porter and wine. Catamenia less abundant. Is frequently the subject of spongy tonsillitis, approximating on œdematous uvula, threatening suffocation at times. A few free applications of the sulphate of copper to the organs, and mustard cataplasm, I have found to be the best local treatment in this distressing affection.

The following is a case illustrating the beneficial effect of arsenious acid in intermittent fever, even where excessive gastric irritation co-existed:—

M. D., a Parsee lady, aged 40; first attacked with quotidian intermittent fever (the rigors being accompanied with excessive emesis continuing during the hot stage and for several hours), five days previously and tenth of her confinement, during which latter she had been roughly treated, the result being acute uterine pains and lacteal suppression. Had been treated with quinine prior to my being consulted.

15th.—A preliminary laxative having been given the night previously, ʒij. liq. potass. arsenitis was ordered in ʒss. doses every second hour, all to be taken by 11 a.m., in order to anticipate the rigors expected at 12.30 p.m. My orders were not strictly carried out, two doses were rejected and paroxysm came on as usual; emesis equally violent and continuous, but hot stage diminished both in intensity and duration.

16th.—Liq. potass. arsenitis ♏xxv. every second hour to five doses, thus, ʒij. and ♏v. were taken before 11 a.m. At 12.30 p.m., the period for the usual paroxysm, violent emesis

EUROPEANS.

Tabular Statement of Intermittent Fevers treated with Fowler's Solution.

Total number treated.	Fevers.	Paroxysms checked in 24 to 48 hours.		Paroxysms checked in 48 to 72 hours.		Paroxysms checked in 72 to 96 hours.		Paroxysms checked, vomiting after solution, but latter continued.		Paroxysms checked. Intestinal irritation present.		Solution failed, and quinine substituted.		Remarks.
		Number of Fevers.	Quantity taken.	Number of Fevers.	Quantity taken.	Number of Fevers.	Quantity taken.	Number of Fevers.	Quantity taken.	Number of Fevers.	Quantity taken.	Number of Fevers.	Quantity taken.	
20	Intermittents	1(a)	♏xl.	6	From ʒij. to ʒijss.	10	From ʒij. to ʒv.	3	From ʒij. to ʒv.	None.	None.	None.	None.	In three cases emesis supervened, after one or more doses, but not continuous, with subsequent ones. Nausea and vomiting are not uncommon results on taking other medicines.

(a) This was in the case of an infant under one year.

NATIVES.

Tabular Statement of Intermittent Fevers treated with Fowler's Solution.

Total Cases.	Fevers.	Paroxysms checked in 24 to 48 hours.		Paroxysms checked in 48 to 72 hours.		Paroxysms checked in 72 to 96 hours.		Paroxysms checked, vomited after solution, but latter continued.		Paroxysms checked. Intestinal irritation present.		Solution failed, and quinine substituted.		Remarks.
		Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	
12	Intermittents	1	ʒijss.	2	From ʒivss. to ʒviss.	9	From ʒiv. to ʒviij.	None.	None.	None.	None.	None.	None.	These were cases treated by Assistant-Apothecary Kinlock at my instigation.

EUROPEANS.

Tabular Statement of Remittent Fevers treated in Hospital, Head-Quarter, H.B., with Fowler's Solution.

Total Number treated.	Remittent Fevers.	Accession checked in 24 to 48 hours.		Accession checked in 48 to 72 hours.		Accession checked in 72 to 96 hours.		Accession checked in 96 to 120 hours, or in 5 days.		Patient under treatment from November 3, to December 1, 1861, or 28 days.		Remarks.
		Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	
14	Remittents	2	From ʒij. to ʒijss.	5	From ʒij. to ʒvj.	2	From ʒij. to ʒss.	4	From ʒiij. to ʒjss.	1	From ʒviij to ʒiv. ʒvj. (b)	These cases were rapidly verging into a low typhoid form.

(b) In this case a relapse supervened, after taking the solution to extent of ʒj.

Tabular Statement of Cases of Neuralgia treated with Fowler's Solution.

Total Number treated.	Neuralgia.	Paroxysms checked from 24 to 48 hours.		Paroxysms checked from 48 to 72 hours.		Paroxysms checked from 72 to 96 hours.		Solution failed, and quinine substituted.		Remarks.
		Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	
4	Cephalalgia periodica	4	From ʒjss. to ʒv.	None.	None.	None.	None.	None.	None.	

NATIVES.

Tabular Statement of Neuralgia treated with Fowler's Solution.

Total Cases.	Neuralgia.	Paroxysms checked in 24 to 48 hours		Paroxysms checked in 48 to 72 hours.		Paroxysms checked in 72 to 96 hours.		Solution failed, and quinine substituted.		Remarks.
		Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	Number of Cases.	Quantity taken.	
2	Cephalalgia periodica	2	From ʒiij. to ʒiv.	None.	None.	None.	None.	None.	None.	Also treated, as above, by Mr. Kinlock.

supervened, yet, strange to say, neither rigors nor the hot stage, though profuse perspiration, followed.

19th.—Since last report the solution has been daily decreased and now omitted, neither emesis nor any febrile symptom has occurred.

P.S.—The patient, though necessarily weak from frequent attacks of fever and confinement to a low, close chamber by reason of prejudice in this caste to being moved till the expiration of forty-eight days after the birth of the child and during which period no ablutions are allowed, is progressing favourably. The above case was treated precisely as I should formerly have with quinine alone or in combination with opium and without the slightest dread that the gastric irritation would be increased by the arsenic.

PRACTICAL HINTS ON THE ACCOMMODATION OF THE EYE, ITS ANOMALIES AND THEIR TREATMENT.

By Mr. J. SOELBERG WELLS.

(Concluded from page 160.)

Considerable diminution, or even complete loss of the power of accommodation, is occasionally met with. We have seen that the range of accommodation is often greatly diminished in presbyopia, the near point having receded to 16″ or 18″ from the eye, so that the range of accommodation is reduced to $\frac{1}{16}$ or $\frac{1}{18}$, instead of being, as in the normal eye, $= \frac{1}{4}$ or $\frac{1}{5}$. The range of accommodation is also frequently considerably diminished in persons who are very short-sighted, whose ciliary muscle has become somewhat rigid.

Diminution or loss of the power of accommodation is often due to paralysis, spasm, or atony of the ciliary muscle.

The fact that we frequently meet with loss of accommodative power, together with a general or partial paralysis of the third nerve, is of interest, for it tends to prove that the ciliary muscle is most likely supplied by a branch of the third, this view is now generally accepted, and the loss of accommodation in such cases is undoubtedly due to a paralysis of the branch supplying the ciliary muscle. The frequency of loss or diminution in the power of accommodation co-existing with dilatation of the pupil due to paralysis of the third, is of importance in the consideration of the mechanism of accommodation.

As long as ophthalmologists, agreeing with Cramer's theory, considered the iris to play a great *rôle* in the production of the necessary convexity of the lens during accommodation for near objects, it was supposed that this dilatation of the pupil was the cause of the loss of accommodation. The anterior surface of the lens, it was thought, was rendered more convex by pressure of the radial fibres of the iris upon the periphery of the lens. But in order that the iris may exert such pressure, anterior and posterior fixed points are required. The contracted sphincter pupillæ (the pupil is contracted during accommodation for near objects) is the anterior fixed point, the ciliary muscle, which also contracts, the posterior. Now, when the pupillary branch is paralysed, dilatation of the pupil ensues, the anterior fixed point is lost, and hence, it was argued, the loss of the power of accommodation.

But that the loss of the accommodative power does not

depend upon the dilatation of the pupil, and consequent inefficient action of the iris, is proved by the facts that—1. Accommodation may be paralysed without any dilatation of the pupil. 2. That the pupil may be dilated without the accommodation being affected. 3. We sometimes find that after the pupil has regained its contractility (after paralysis of the nerve to the constrictor pupillæ), the power of accommodation remains yet for some time impaired. 4. With a weak solution of atropine (1 part to 2000 parts of water) we may dilate the pupil fully, without completely paralysing the muscle of accommodation; in order to do so, we must use a strong solution (1 part to 120 of water). That the iris is not of any particular importance in bringing about the accommodative changes of form in the lens, is proved by Von Graefe's interesting case of total loss of the iris, in which the power of accommodation was normal (a).

We must, therefore, look upon the ciliary muscle as the principal, if not the sole, factor in producing the necessary changes in the form of the lens during accommodation.

We sometimes find the branch to the ciliary muscle alone paralysed, all the other branches of the third being intact. Again, this isolated paralysis of the branch to the ciliary muscle sometimes co-exists with paralysis of other nerves, particularly of branches of the facial nerve. Paralysis of the ciliary muscle is sometimes due to cerebral causes; indeed, mydriasis with loss of the power of accommodation, is not an unfrequent precursor of cerebral affections. It is at times due to syphilis, congestion, etc.

Diminution or loss of accommodation is occasionally met with after severe illnesses; the whole muscular system being greatly debilitated; it is then often mistaken for amblyopia dependent upon general debility. Mr. George Lawson has lately reported some interesting cases of this form of loss of accommodation (b).

Loss or diminution of accommodation dependent upon spasm of the ciliary muscle is, according to Von Graefe, exceedingly rare. Distinct vision is in these cases limited to the near point, or lies even on this side of it. The patient is myopic; but for every variation in the distance of the object, a different concave glass is required.

Having now considered all the anomalies of accommodation and refraction, I would, for the convenience of the general reader, give, in conclusion, a short *résumé* of some of the principal points we have touched upon.

The accommodation of the eye, by which we mean the power of adapting itself to different distances, is brought about chiefly, if not indeed exclusively, by the action of the ciliary muscle upon the crystalline lens. The anterior surface of the latter becomes more convex, and moves slightly forwards during accommodation for near objects. Helmholtz has observed that the posterior surface of the lens also increases slightly in convexity, but does not apparently change its position. The ciliary muscle consists of circular and radiating fibres. According to Henke (c), in accommodation for near objects the circular fibres are shortened, the radiating lengthened; the reverse taking place in accommodation for distance.

By the term "range of accommodation," we mean the range between the nearest and furthest point of distinct vision. A normal eye, for instance, can see distinctly from about 5″ to an infinite distance. Its near point lies at 5″, its far point at an infinite distance, the distance between these two points is termed its range of accommodation.

Myopia.—In the short-sighted eye, the antero-posterior axis is too long, or the refractive power of the eye too great, so that the focus of the dioptric system, when the eye is in a state of rest, lies before the retina. In consequence of this, parallel rays emanating from distant objects, are united before the retina, and only more or less divergent rays, emanating from near objects, are focused upon it. By giving parallel rays the required divergence by means of concave glasses, we enable the myopic eye to unite them upon the retina.

The furthest distance at which No. 1 of Jäger can be distinctly and easily read, gives us the degree of the myopia. If this far point lies at 12″, the myopia = $\frac{1}{12}$. The patient will require about concave 12 for seeing at a distance,—for this glass gives rays coming from distant objects, a divergence as if they emanated from an object 12″ in front of the eye. As the patient cannot quite accommodate himself for his far point with his optic axes converging to 12″, a somewhat weaker glass will be required. With it he should be able to read No. 18 of Jäger, and words of No. 16 at a distance of twenty feet.

Range of Accommodation is easily found by the formula $A = \frac{1}{p} - \frac{1}{r}$. We change the myopic eye into a normal one by means of the concave glass, which enables it to see distant objects perfectly; we then find where the nearest point lies at which (still wearing this glass) No. 1 of Jäger can be read. If this near point lies at 7″ from the eye, the range of accommodation (A) = $\frac{1}{7}$. For the near point (p) = 7″, the far point (r) = ∞. Hence $A = \frac{1}{7} - \frac{1}{\infty} = \frac{1}{7}$.

Causes of Myopia.—Short sight is often produced by incessant work at near objects, as in engraving, etc.; by opacities of the refracting media, on account of which the person approaches the object very near to his eye, in order to obtain larger retinal images; and by lengthening of the eye-ball, as in sclerotico-choroiditis posterior.

Spectacles.—We may without hesitation permit short-sighted persons the use of spectacles for distant objects, or for objects at a few feet distance. When the range of accommodation is good, and when no amblyopia exists, they may also, if necessary, wear spectacles for reading, etc. But when the range of accommodation is slight, when there is amblyopia (generally dependent upon sclerotico-choroiditis posterior), spectacles for near objects must not be permitted. For, on account of the amblyopia, the patients will bring the work very near to the eye in order to obtain larger retinal images, the accommodation will be greatly strained, the intra-ocular pressure increased, and great mischief will soon ensue.

Presbyopia.—Presbyopic persons can see well at a distance, but not near at hand. In reading, the book is held at a considerable distance, perhaps 16″ or 18″ from the eye. Presbyopia generally shows itself about the age of 45 or 50. It is due to the recession of the near point from the eye. This recession already commences at the age of 10, and progresses steadily and continuously to advanced age. At 45 the near point has receded to 8″ or 9″ from the eye, and the patient consequently begins to experience some annoyance. Hence Donders considers an eye presbyopic when the near point has receded further than 8″ from the eye.

The degree of presbyopia is found by deducting the near point (8″), at which we consider presbyopia to commence, from the presbyopic near point. If the latter lies at 16″, the formula will be $Pr = \frac{1}{16} - \frac{1}{8} = -\frac{1}{16}$. The presbyopia $= -\frac{1}{16}$; convex glasses of 16″ focus will bring the near point back again to 8″.

Both the myopic and hypermetropic eye may become presbyopic with advancing years. If the myopia = $\frac{1}{16}$, and the near point lies at 12″, presbyopia = $\frac{1}{24}$ co-exists with the myopia. When the latter is very great, *e. g.*, $\frac{1}{7}$ or $\frac{1}{6}$, of course presbyopia cannot exist.

If a hypermetropic person cannot, with the glasses which neutralise his hypermetropia and enable him to see at a distance, see small print nearer than 12″, he is also presbyopic, and will require a stronger pair of convex glasses for near objects.

Range of Accommodation.—This is of course always diminished, owing to the recession of the near point. If p lies at 12″, and r at infinity, $A = \frac{1}{12} - \frac{1}{\infty} = \frac{1}{12}$.

Spectacles.—The degree of the presbyopia gives us approximately the glasses required. But generally, on account of the convergence of the optic axes, a somewhat weaker glass will be best. If no hypermetropia exists, and if the range of accommodation is good, we may generally prescribe the glass with which No. 1 of Jäger can be distinctly and comfortably read at 12″ distance. In old persons whose vision is not so acute the near point must sometimes be brought to 6″ or 7″. The greater the range of accommodation, the nearer may it be brought.

Hypermetropia.—In this affection the refractive power of the eye is too low, or its antero-posterior axis too short, so that when the eye is in a state of rest, parallel rays, emanating from distant objects, are not focused upon the retina, but behind it, only convergent rays being united upon it. But the latter do not exist in Nature, and the eye must either exert its accommodation to render parallel rays sufficiently convergent to be brought to a focus upon the retina, or we must, by means of the proper convex glass, give them

(a) Von Graefe's Archiv. vii. 2. 150.
(b) *Lancet*, vol. i. 1861.
(c) Von Graefe's *Archiv.*, vi. 2, 53.

a sufficiently convergent direction. In the latter case we neutralise the hypermetropia, and transform the hypermetropic into a normal eye, which unites parallel rays upon the retina without almost any exertion of its accommodative apparatus.

The presence of hypermetropia is thus tested. If a person can see distant objects through a convex glass, he is hypermetropic. The best object is Jäger's test-type. The strongest glass with which the patient can read at a distance of 20′ gives us the degree of hypermetropia *before* the action of atropine. If this glass be convex 24, his hypermetropia $= -\frac{1}{24}$. The power of accommodation is then to be paralysed by a strong solution of atropine (four grains to one ounce of water); after this has acted for from two to three hours, the degree of hypermetropia is to be again tested. In young persons with a good range of accommodation, the difference in the convex glass required before and after atropine is often very considerable. In the normal eye the far-point begins to recede from the eye about the age of 55 or 60, the eye becomes hypermetropic, at 80 the hypermetropia may, according to Donders, $= \frac{1}{24}$.

Range of Accommodation.—We change the hypermetropic eye into a normal one by means of the suitable convex glass, and then find the nearest point at which No. 1 of Jäger can be read with this glass. If the near point lies at 7″, $A = \frac{1}{7}$.

It has already been pointed out that presbyopia may co-exist with hypermetropia.

Spectacles.—A person suffering from hypermetropia must be gradually accustomed to wear those glasses which neutralised his hypermetropia after the accommodation was paralysed by atropine. At first weaker glasses will be required, but the strength should be gradually increased until he has arrived at the glass which really neutralises his hypermetropia. These spectacles should be worn both for near and distant objects, should, indeed, be always worn when the eyes are used. If the hypermetropia is great, or if presbyopia co-exists, two pairs of spectacles will be required, a strong pair for reading, etc., a weaker for distance.

Hypermetropia is a very frequent cause of Asthenopia, and also of Convergent Strabismus. The asthenopia is produced by the overstraining of the accommodative apparatus in reading, writing, etc., without the proper spectacles. We have seen that the hypermetropic eye has already to exert its power of accommodation, more or less, for distant objects, in viewing which the normal eye hardly uses its accommodation at all. How much greater must this exertion be when the hypermetropic eye looks for any length of time at near objects, the rays from which are strongly divergent. The eye cannot keep up this great strain of its powers of accommodation for any length of time, and hence symptoms of asthenopia soon arise.

Hypermetropia often causes Convergent Strabismus.—As the power of accommodation increases when the convergence of the optic axes is augmented, a person suffering from hypermetropia often squints inwards involuntarily, in order to see more distinctly. This squint soon becomes permanent, if the hypermetropia is not treated, and a strabismus operation will then be required.

I have endeavoured in these papers to lay before the reader, in an easy and practical form, the modern theories of the affections of refraction and accommodation. I am well aware that I have touched but slightly upon several important theoretical questions, the thorough elucidation of which would have required a far more lengthy consideration than would have harmonized with the brief and practical character which I desired to give to these papers.

It will have been observed that there are indeed many questions to be considered in the treatment of these affections; and I would strongly impress it upon the reader, that after he has made himself completely conversant with the theoretical portion of this subject, that it is only by a thorough practical examination of a number of cases that the requisite facility in the choice of spectacles, the examination of the range of accommodation, etc., can be acquired. To those who consider the views we have propounded somewhat abstruse and unpractical, I would reply that the apparent difficulties lie but on the surface, and that a little perseverance and practice will soon unravel the knotty points.

The proper and scientific choice of spectacles is indeed of great importance to the public, and I have no hesitation in saying that the empirical, hap-hazard plan of selection generally employed by opticians is but too frequently attended by the worst consequences, that eyes are often ruined, which might by scientific treatment have been preserved for years. I would therefore strongly recommend the adoption of the following plan which is largely employed on the Continent, and also by several ophthalmologists in England:—The Medical man himself selects the proper glass from his spectacle-box (which contains concave and convex glasses, corresponding numbers being kept by the optician); the focal distance of the required glass is written on a slip of paper, which the patient takes to the optician who supplies him with the spectacles thereon prescribed. Thus are we sure that the patient is furnished with the proper glasses.

16, Savile-row, W.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

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KING'S COLLEGE HOSPITAL.

REMOVAL OF A RECURRENT FIBROID TUMOUR FROM THE LEG.

C. K., aged 50, a healthy-looking man, but of dissipated habits, was admitted into King's College Hospital, under Mr. Partridge, on May 6, 1859, with a tumour on the front and outer side of the right leg at the junction of the middle and lower thirds. He was first aware of a swelling two years before, and attributed it to a blow. It was then a well-defined circumscribed swelling, the size of a large orange, very tense, elastic, not lobulated; the skin covering it was smooth, red, and shining, and at the summit had a tendency to ulcerate. At times there was a shooting pain from the tumour up the leg. The femoral glands were slightly enlarged.

On May 30, 1859, Mr. Partridge removed the tumour, making a long incision over it, and turning it out of a thin fibrous capsule in which it was contained. It was quite superficial to the fascia except at one point, where there was a small hole. On section, the tumour had the appearance of medullary cancer.

July 20.—Discharged.

On September 8 he was re-admitted with another tumour, about the size of a walnut, to the outer side of the cicatrix. This was removed, and on November 5 he was again discharged.

On September 9, 1861, he was re-admitted into the Hospital, under the care of Mr. Hulke, with a tumour about the size and shape of a billiard-ball, in the situation of the scar of the second operation. It was so elastic that fluctuation was most deceptively simulated. It was so fixed that Mr. Hulke had some doubt whether it might not spring from the periosteum of the tibia. Contraction of the extensor muscle imparted no motion to it. The skin was very tightly stretched over it, thin, red, and shining, and the old scar was about to ulcerate.

To-day, September 14, Mr. Hulke removed the tumour by an elliptical incision, which included the red and thinned integument and the degenerating scar; it was enclosed in a thin fibrous capsule, which adhered closely to the periosteum and fascia over the extensor muscles, but was completely separable from it. This cyst was carefully dissected out. There was little bleeding, and no vessel required ligature.

September 24.—The fascia and periosteum are covered with granulations, and cicatrization is proceeding rapidly at the edges of the wound. Water dressing only has been used.

CASE OF EPITHELIOMA.

A circular wart, about the size of a sixpence, the edges raised and indurated, the centre slightly depressed and

excoriated. The patient, a man of about 40, first noticed what he supposed to be a small common wart several months ago, but paid no attention to it till lately, when its increase led him to seek Medical advice. Its epithelial cancroid character being, Mr. Hulke said, unmistakable, he removed it with the knife, which he considered to be preferable to caustic in most instances.

DIVISION OF TENDO ACHILLIS (THE SECOND TIME) FOR TALIPES EQUINUS.

A boy, aged 14. The tendon had been already divided about three months previously, but the skin in front of the ankle having become excoriated by the pressure of the collar of Scarpa's shoe, extension could not be efficiently maintained. Mr. Hulke, under whose care the boy came, a fortnight since, finding that the foot could not be extended beyond a right angle with the leg, re-divided the tendon. Owing to adhesions, and some consolidation of the tissues around the tendon, consequent on the first operation, the division was not accompanied by a sudden snap and yielding.

FORCIBLE EXTENSION OF AN ANCHYLOSED HIP.

A boy, aged 13, was admitted into King's College Hospital' September 7, 1861, under the care of Mr. Hulke, with great distortion of the right lower extremity consequent on former hip-joint disease. His mother says that six and a-half years ago a girl carrying him fell against a wall and bruised his hip, which became inflamed, but recovered after some months' treatment at one of the London Hospitals. About one year after this he was let fall and hurt his right thigh; this was followed by an abscess in its middle third which healed soundly, and does not seem to have been connected with the hip.

Condition on Admission—The right thigh incompletely anchylosed to the pelvis at a right angle to the trunk. Extension beyond this angle, and abduction are impossible, but limited flexion and adduction can be performed. When standing with the trunk bent forwards, the points of the toes just touch the ground. Owing to obliquity of the pelvis the right thigh is apparently two and a-half inches shorter than its fellow, but a comparison of the measurements from the anterior superior spinous process of the sternum to the upper border of the patella shows the real shortening to be one and three-quarter inches. The limb is dwarfed and the buttock is wasted. The head of the femur cannot be distinguished on the dorsum ilii, but the trochanter major is more prominent and higher than it should be. Examination of the limb gives no pain unless force is used. The boy's health is good, and there are no signs of any visceral disease.

September 14.—The child having been put under chloroform, and the pelvis fixed by an assistant, Mr. Hulke extended the thigh by steady pressure. After a few moments some adhesions were felt and heard to crack, and now flexion and adduction could be performed with great freedom, but complete extension seemed to be prevented by tightness of the anterior head of the rectus, this was therefore divided subcutaneously, with the effect of relaxing the thigh, which was at once brought straight.

On the boy's removal to bed, extension was at once made from the leg and foot with a weight suspended at the end of the bed by a tape which was fixed to a loop of plaster, the ends of which were carried up the outside and inside of the leg to just above the knee. The weight used is a bag of sand which is very convenient as it can so easily be made lighter or heavier, by putting in, or taking out, a little of the sand. Counter extension was made by a perineal band the ends of which were tied to the rest at the head of the bedstead, the immediate object of the extension is to draw the torn surfaces of bone, etc., apart, and prevent them grinding against each other, a fertile source of mischief in hip cases; and the prospective object to glide slowly down the upper end of the femur on the pelvis till the limb is as long as the other, and then with a Davis' splint Mr. Hulke hoped to obtain anchylosis or false joint in this position. In order to prevent any inflammation, or to control it if it should arise, Mr. Hulke ordered a caoutchouc bag of ice to be immediately applied to the hip.

September 24.—The ice has been constantly applied. The hip is wholly free from pain and swelling. Local inflammation has been entirely prevented. In a few days Mr. Hulke hopes that the boy will be up and about with the limb on an extension splint.

CUMBERLAND INFIRMARY.

DEATH WHILE UNDER THE INFLUENCE OF CHLOROFORM—AUTOPSY.

(Under the care of Mr. PAGE.)

[Reported by Mr. DEVEREUX, House-Surgeon.]

T. C., aged 35, carpenter, was admitted on August 17, 1861. A year ago he received an injury to his urethra, two inches from the perile orifice. He then had complete retention of urine, on account of which he became an inmate of an Infirmary, where he was relieved by tapping the bladder; and afterwards no catheter was got through the stricture.

During the last few months his urine has passed by drops. In this state he was admitted into the Cumberland Infirmary, and after several ineffectual attempts to pass a small catheter, and owing to the sensitiveness of the parts, it was proposed to do it under chloroform, to which the patient readily agreed.

On the 5th inst. chloroform was administered by Mr. Devereux, the House-Surgeon, by means of a small piece of lint made in the shape of a cone. Two drachms were used. Insensibility was produced in the usual way, without the patient exhibiting any unusual symptoms. The lint was then removed from the mouth, and Mr. Page commenced the operation. In about two minutes afterwards a sudden change was observed in the expression of the patient's face. The lips became livid, the eyelids were half open, and the pupils were much dilated. He was then observed to take a deep inspiration, and the pulse ceased almost immediately. Galvanism and artificial respiration were resorted to, and kept up for twenty minutes, without producing more than three or four spasmodic efforts at inspiration.

At the post-mortem examination, next day, the heart, lungs, and liver were structurally healthy, but slightly congested. The blood was fluid throughout the body. The kidneys.—The whole structure of the left was converted into ten cavities, varying in size from a hazel-nut to a pigeon's-egg, separated from each other by thin walls. Their interior was filled with a mixture of pus and a thinner clear fluid. The left ureter was much thickened, and filled with thick purulent matter. Right kidney weighed six ounces and a-half, and appeared quite healthy, with the exception of its increased size. The walls of the bladder were thickened, and the urethra corresponding to the seat of obstruction was found nearly obliterated by a hard cicatrix.

NEWCASTLE-ON-TYNE INFIRMARY.

DEATH WHILE UNDER THE INFLUENCE OF CHLOROFORM—AUTOPSY.

(Under the care of Mr. ANNANDALE.)

[Reported by Mr. BOLTON, House-Surgeon.]

John C., aged 32, was admitted into the Newcastle Infirmary on August 15, under the care of Mr. Annandale, for scrofulous disease of the left knee-joint. Amputation was proposed, and to this he consented, though the idea seemed to fill him with alarm.

On Tuesday, September 3, being operation-day, he was prepared with others for operation, but being in a state of great trepidation he was ordered brandy prior to being removed to the operating-theatre. On being placed on the operating table he was still labouring under considerable alarm. Mr. Bolton, the House-Surgeon, in the presence of Sir John Fife, Mr. Annandale, and other gentlemen, administered chloroform. He was readily placed under its influence, without any respiratory or muscular excitement whatever. There was no more than two drachms of chloroform used, dropped in the usual way upon a simple fold of bandage held over the nose, and the tourniquet was being applied to the limb, when a sudden relaxation of the sphincters took place, the pupils dilated, the pulse ceased, and respiration continued but a few seconds after. Galvanism, artificial respiration, and other means were promptly resorted to without avail. He was dead.

At the post-mortem examination the right side of the heart was found gorged with blood, as might have been expected in death from cardiac syncope. There was no pulmonary con-

gestion, and, further than might be expected in a scrofulous subject, there was no evidence of disease in any of the internal organs.

THE LONDON HOSPITAL.

POPLITEAL ANEURISM—PRESSURE TREATMENT—CURE IN TWENTY-ONE DAYS.

(Under the care of Mr. CRITCHETT.)

The following is a good instance of the advantages of the compression plan, as the patient suffered very little inconvenience during the treatment, and there was no drawback whatever. He was a thin, sallow man, not a good subject for an operation. He had been much in hot climates, and had suffered from yellow fever. The aneurism was large, and was rapidly increasing when compression was begun. It is worth note that a week's trial of the ice and position treatment gave a decidedly unfavourable result, as the tumour increased to double its size. The aneurism did not occupy quite the usual position, being just above the popliteal space, and bulging outwards between the bone and the hamstring tendons. At the time that compression was begun it was as large as a large orange. The following are the notes of the case supplied to us by Mr. Witherley, the dresser of the patient:—

M. T., a seaman, aged 27, enjoyed good health till about the middle of July, 1861. At this time a small hard swelling, about the size of a walnut, appeared near the right popliteal space. The patient attributed this swelling to a cold, taken from sleeping on deck. The swelling was only slightly painful, and the pain always abated when he had used the limb for some minutes, returning again when he resumed the sitting posture. He had also difficulty in straightening the leg. A week after its appearance the tumour was noticed to pulsate, and continued to increase in size till August 10, when the patient was admitted into the London Hospital. The pain was worse when in bed, and of a dull, aching character; there was an occasional numbness in the leg and foot, and swelling around the ankle; the swelling around the ankle appearing and disappearing within a few hours. During the first week that the patient was in the Hospital ice was applied to the tumour, and the leg kept bent upon the thigh. No good result was obtained; on the contrary, the aneurism rapidly increased in size. On August 17 the tourniquet was applied at the apex of Scarpa's triangle, and kept on day and night, the patient merely removing it when he went to the closet. Occasionally the instrument slipped off during sleep, but on waking the patient invariably replaced it immediately. The tumour rapidly diminished under the pressure treatment, and twenty days after its application (September 5) became almost entirely free from pulsation. The pulse at this date was 64 per minute, the appetite good, the tongue clean, and the bowels regular. Throughout the treatment the patient had been on full diet.

September 5.—The tourniquet was removed, the patient remaining most of the day in bed, but walking a little about the ward.

10th.—The pulsation is now completely arrested, and the patient appears perfectly well.

11th.—The patient is walking about with a bandage on, and says that his leg feels quite strong, and free from pain and numbness. Still the thickened swelling that remains prevents his flexing his knee completely.

"DREADNOUGHT" SEAMEN'S HOSPITAL.

CASE OF ASIATIC CHOLERA—RECOVERY.

(Under the care of Dr. STEPHEN WARD.)

[Communicated by Mr. COOKE.]

Gilbert G., a sailor, aged 18, was admitted into the Seamen's Hospital-ship *Dreadnought* on September 8, in a state of extreme collapse. His statement was that his ship, a collier, had sailed from Sunderland, and had been lying off Blackwall for the last fourteen days, and being very leaky, the pumps had to be used both by night and day, and that he had become very wet and much exhausted. Last night he was suddenly seized with vomiting and profuse purging, attended with severe abdominal pain. He was purged three or four times in quick succession, and it then ceased; the vomiting was continuous. On admission at 10 a.m., his appearance was very peculiar; the surface of the skin was cold and blue, the lips purple, and the tongue cold to the touch, the body appeared shrunken, the eyes sunk in their sockets, the nails blue, and fingers withered; the pulse extremely small and feeble, the voice husky and faint; the spasms were confined to the muscles of the abdomen. No urine had been passed since the attack; and beyond the four evacuations, no stool had been passed. The vomit was free from bile, and looked like rice-water. His intellect was perfectly clear; but he was quite apathetic as to his state.

He was ordered to have a hot vapour-bath, have ice to suck, and small quantities of brandy and soda-water, bottles of hot water to the feet and abdomen, and friction every half-hour to the body. Slight reaction was produced by the air-bath, and this was repeated in six hours.

In the evening very little change had taken place. A small quantity of high-coloured urine had been passed—specific gravity 1022,—with a slight amount of albumen, but with no chlorides. Vomiting slightly less.

September 9.—The friction having been continued during the night, the warmth of the skin was somewhat restored. There was vomiting, containing bile; and his thirst was less. The upper extremities were still cold, clammy, and shrunken. He had slept, and expressed himself as better, though the lividity still continued.

10th.—The friction has been continued at longer intervals. The vomiting has ceased. Urine—specific gravity 1015, with no albumen, no chlorides, and paler—was passed during the night. Still no evacuation from the bowels.

15th.—Has been gradually improving; bowels open for the first time; is able to walk about, and allowed mutton diet; and on the 16th he was allowed to leave at his own wish. Some lividity still existed, and the voice was still husky; but in every other respect he was perfectly well.

That this was a true case of Asiatic cholera seems sufficiently proved from the symptoms,—the rapidity with which collapse set in, the extreme lividity and shrinking of body, the huskiness of the voice, the feeble circulation, the absence of bile from the vomit, and entire absence of chlorides from the urine,—proving that the saline matters of the blood had passed off from the system in some other way. Dr. Ward had no doubt as to the nature of the case. As to the nature of the stools, the patient, from his occupation, could give no account beyond their being extremely bulky. Moreover, the amount of diarrhœa among sailors has been extremely slight this summer, judging from the few cases that presented themselves here. Admitting this to be a true case of Asiatic cholera, it would seem to bear out the evidence of the choleraic poison being present in the atmosphere, requiring only a fitting subject for its manifestation.

LIVERPOOL ROYAL INFIRMARY.

ANEURISM OF THE THORACIC AORTA TERMINATING FATALLY BY RUPTURE OF THE SAC EXTERNALLY.

[Reported by Mr. RAWDON, House-Surgeon.]

Hannah W., aged 27, married, but without family. She was admitted into the Liverpool Royal Infirmary on March 23, 1861. She said that she had always had good health until about ten months ago, shortly after the reception of a blow on the chest, when she perceived a pulsating tumour, about the size of a marble, placed over her breast bone. Being ignorant of its dangerous nature, and from the circumstance of its not causing her any inconvenience, she did not seek Medical advice until the tumour had increased to the size of a large orange.

On admission she did not present an unhealthy aspect, nor was her countenance expressive of any anxiety. There was found a pulsating swelling the size of a very large orange situated over the sternum, but rather to the left side. Three prominences, or secondary sacculations, existed on the surface of the tumour, in which the pulsation was most intense. A very distinct aneurismal bruit could be heard over the tumour. There was no perceptible difference in the pulses of either wrist, and she stated that she never had suffered from any difficulty in swallowing or in breathing, and could

run up stairs with ease, not feeling either palpitation of the heart or being short-winded.

Finding herself improved after a fortnight's treatment by rest, she went out, but had scarcely been out a month when she was re-admitted, the tumour having given way on the previous night at one of the prominent spots, and a considerable bleeding occurred, which ceased spontaneously. She appeared much prostrated, and was very anæmic. She lingered, however, for three weeks, the hæmorrhage twice recurring, and each time was arrested by ice and sand-bag pressure. But the aneurism again burst, the blood being pumped forth in a copious and unrestrainable torrent. After remaining in a state of syncope for an hour, she then succumbed.

Autopsy.—All the organs and structures were found healthy except the aorta and its valves, the edges of which were everted. The aorta was generally thickened and very atheromatous. There was a saccular opening about half-an-inch above the right coronary artery large enough to admit a walnut, and also a smaller one above the larger; these both led to the aneurismal sac which was firmly attached to the posterior surface of the sternum. The periosteum and the sac appearing to have grown together. The aneurism seemed to be divided by the sternum into two portions, a quarter of the aneurism being behind and three-quarters in front of the sternum, which was much absorbed posteriorly and to the left, the cancellous tissue being in parts entirely gone. The opening from the posterior to the anterior portion of the sac was comparatively small, only just admitting two fingers. The sac contained the usual concentric fibrinous layers.

CHESTER INFIRMARY.

LARGE HYDATID TUMOUR OF THE PELVIS, SITUATED BETWEEN THE BLADDER AND THE RECTUM—DEATH—AUTOPSY.

(Under the care of Mr. BRITTAIN.)
[Reported by Mr. HUGHES, House-Surgeon.]

G. S., aged 46, a labourer, admitted July 15, 1861. He stated that a month before he first noticed a collection of matter beneath the prepuce, but that never before had he noticed anything wrong with the urinary passages. On July 11 he first complained of difficulty and pain in micturition, for which he had Medical advice, but without obtaining much relief. When admitted, the catheter was used and found to pass freely, but no urine followed. On the withdrawal of the catheter a clot of blood was noticed in the eye of the instrument. On the 18th the lower part of the abdomen was found to be greatly distended, dull on percussion, and there was great tenderness on pressure. The catheter was again passed, and with a similar result. Urine dribbled from the bladder all the time as he lay in bed. The bowels were obstinately costive, to correct which, powerful aperients were given, and also opiates to relieve pain. About three days before death a small hydatid came away after using the catheter. This at once explained the nature of the case. He gradually grew worse up to the 27th, on the afternoon of which day he died.

Autopsy.—Body generally well nourished, abdomen greatly distended. On making an incision through the integuments, a gush of fluid took place, which was at first thought to be serum, but on further examination it was found that the bladder had been cut into. This viscus was found distended much beyond its usual size, reaching upwards to above the umbilicus, and was firmly adherent to the peritoneum. Beneath the bladder, and occupying nearly the whole of the cavity of the true pelvis, was seen a large tumour of a bluish grey colour, and firm consistence, which, on examination, proved to be a large cyst full of hydatids in various stages of development, some as large as a pigeon's egg. The walls of the cyst were firmly adherent to the rectum, and the fundus and neck of the bladder. A catheter introduced per urethram passed into the tumour, but when the handle of the instrument was depressed until it was between the thighs, it then entered the bladder. The great displacement of the neck of the bladder accounted for the inability to reach the bladder during life. There was no stricture. The constipation, also, was readily explained, as the tumour pressed directly on the rectum, and acted as a mechanical obstruction.

Medical Times and Gazette.

SATURDAY, SEPTEMBER 28.

SUPPORT OF SECRET REMEDIES BY MEMBERS OF THE PROFESSION.

A FEW weeks ago we drew the attention of our readers to the following advertisement, which had been frequently published in the daily papers:—

"Liebig's Invigorative Essence.—This most scientifically-prepared and most powerful nutritive cordial ever introduced, restores to their normal condition all the secretions, on the integrity of which perfect health depends. It is a specific for debility of all kinds. There is no need for vaunting its merits in the usual charlatanic style, as, for the satisfaction of the public, Messrs. Baumgarten and Co. (the sole agents for the proprietor) have submitted it to the first analytical authority of the age, whose support is subjoined:—'Chemical and Microscopical Laboratory, 74, Wimpole-street, May 30, 1861.—Having analysed the preparation to which Messrs. Baumgarten and Co. have given the name of 'Invigorative Essence,' I am of opinion that it is a combination well calculated, from its containing, among other ingredients, pepsine and phosphate of soda, to prove serviceable to the debilitated, the nervous, and the dyspeptic. (Signed) Arthur Hill Hassall, M.D., London, Analyst to the Sanitary Commission.' To be had of all chemists throughout the country. Price 11s. per bottle, or four quantities in one for 33s. Sole agents for the proprietor, Messrs. Baumgarten and Co., 520, Oxford-street, W., and 113, Leadenhall-street, E.C., London, to whom remittances may be made by stamps or post-office order."

We came at once to the conclusion that Dr. Hassall in lending his name to the vendors of a secret remedy for the purpose of assisting them in its sale had acted contrary to his duty as a Member of the Medical Profession, and had violated both the letter and the spirit of the contract on the strength of which he holds the diploma of the College of Physicians. We stated that the certificate appeared to be very disgraceful to Dr. Hassall, but we withheld all further comment, as we were desirous of affording an opportunity for explanation, reparation, or apology.

During the interval which elapsed since the publication of our challenge on this subject, one of our most esteemed correspondents, disgusted with the evident abuse which was made of the name of Baron Liebig in the advertisement of Messrs. Baumgarten and Co., addressed a letter to this firm, in which he inquired, whether their "Liebig's Invigorative Essence" had been suggested or sanctioned by Professor Justus von Liebig at Munich, and if such was not the case, which person of the name of Liebig was implied by the Liebig of their advertisement.

In answer to these inquiries, our correspondent received a printed circular containing on three pages six columns of printed matter, purporting to set forth the "History, Theory, and Action of the Medicine." "To the intelligent mind the only avenue is reasoning," says the writer of this document, and accordingly he sets about reasoning with iron, phosphate of lime and pepsine, until he has reasoned the data and the fictions concerning them into "indisputable facts," upon which basis he suddenly becomes oracular, and advises that it should be the object of the philosophic experimentalist to combine all remedial agents of specific action in one invigorating cordial. "This is the object which has been accomplished by the discoverer of the compound called 'Liebig's Invigorative Essence." The reasoning process to the intelligent mind then continues, and comes to a climax in the following passage:—'As the greatest assistance (in the 'discovery' of the Essence) has been derived from Liebig's researches on

organic chemistry—the idea of the Medicine itself originating in a desire to utilise those researches for the public benefit,—*it was considered to be no more than a graceful compliment to attach to a medicine of such power the name of the man without whose valuable discoveries it would probably never have existed.*'"

Our correspondent thereupon addressed a second letter to Messrs. Baumgarten and Co., in which he informed them that as it was evident from their circular that Baron Liebig had neither invented nor sanctioned the Essence to which they attached his name, they were taking an unwarrantable liberty by in any way using it in connexion with their Essence. He also gave expression to his belief that the name of the Munich Professor was attached to the mixture for the purpose of procuring it a sale, and that the alleged intention of paying a "graceful compliment" was only a sophistical pretext for effecting the real purpose of the promoters of the Essence.

To this Messrs. Baumgarten and Co. replied by a letter in which, after disclaiming the imputed intentions with regard to the name "Liebig," they expressed their desire not to mislead the public, not to give offence to the Medical Profession, and not to offend the sensibilities of the Baron's friends, all of which, they said, our correspondent's letter sufficed to show they had done. They then gave the assurance that immediately on receipt of our correspondent's second letter they sent to their advertising agents to stop the objectionable advertisements, and that the name of Liebig should never appear in future.

For this prompt and unqualified yielding to a forcible remonstrance, a certain amount of credit is due to Messrs. Baumgarten. They are, perhaps, not themselves the "discoverers" of the Invigorative Essence, and therefore not responsible for the nature of their reasoning; perhaps the proprietor, whose agents they profess to be, is also not a member of their firm. Perhaps "the projector, and proprietor, and many others who have assisted him," have hitherto been considered members of the Medical Profession, registered according to the Medical Act, and there has perhaps been no reason of suspecting them of holding forged diplomas, or diplomas obtained after examination by proxy. However, after the late revelations with reference to the qualifications of one "Dr." Griffiths Jones, the projector, discoverer, and, at one time, proprietor of Axtra Mankaz, it will be the duty of Messrs. Baumgarten and Co. to investigate how far it is compatible with their wish not to mislead the public, that their house should continue to be the dépôt for Axtra Mankaz.

But while Messrs. Baumgarten and Co. were candid enough to remove the "imposing" name of Liebig from their flourishing title of advertisement, Dr. Hassall has not even attempted any explanation of his extraordinary certificate, although for more than a month the opportunity has been open to him. He has not even attempted to excuse the help which he gave towards the sale of a mixture which passed under a name calculated to mislead the public; a name, which he found so objectionable, that he did not repeat it in his certificate. Dr. Hassall has not, as he ought to have done, retraced a step to which in an evil hour he was seduced. His name has appeared as defending the Invigorative Essence advertised by the vendors of Axtra Mankaz. The unanimous judgment of all right-minded persons must be, that he has thus disgraced the Profession and the College of which he is a member. The College of Physicians, it is to be hoped, will take the subject formally into consideration, and bring the question to the issue of either purifying the Member of the infection, or ridding itself of the infected Member.

This climax of the crying abuse of advertising articles of sale in conjunction with certain recommendations from members of the Medical and Chemical Professions, which has of late become more frequent than ever, proves that it is necessary to make some inquiries into the nature of those certificates, called testimonials. They mostly set forth that the writer had instituted a careful microscopical and chemical analysis of the substance in question, and that he had found it to be of the nature described by the advertisers. According to the properties of the article recommended, certain finishing strokes are added to the larger features of the testimonial, which are intended to exhibit the candour of the writer, the search of his analysis, or the penetration of his intelligence. Thus the analysis of Mr. Souchong's green tea yielded some Prussian blue, but it was less in quantity than in ordinary green tea, or less than might have been supposed. In this manner, the analyst establishes a basis of candour upon which the superstructure of his testimonial rests. If the article analysed was Mr. Treblestout's beer, it has of course been found wholesome, and free from such noxious ingredients as strychnia, and the amount of extract which it contained was so large, that the analyst was able to pronounce it more nourishing than any other description of beer in existence. Another ingenious inventor, Mr. Chicory, who wants to make life Olympic by feeding man with nectars of his own production, offers them in the shape of Essences; among them his essence of coffee ranks first, and the analyst, who has, of course watched this essence the necessary number of years, as he has no other chemical virtue of the substance to declaim upon, dilates upon its durability, which is of course greater than that of any other similar production. The freedom of bread from alum; the excellence of vinegar, as testified by its fine colour and freedom from sulphuric acid; the distinction of green pickles done in silver pans and "consequently" free from copper, have all been the subjects of such certificates. A great many others it is useless to recount or even to remember.

So long as the practice was confined to articles of which every ordinary person might himself be a competent judge, it presented no dangers which called for any very strong remonstrance against its continuance. It was not likely that people should think bad stout good because they got a certificate with it; it was most improbable that quarterly reports on the tea sold on a particular day by Mr. Souchong should flavour this gentleman's sloe-leaves to the extent of making them highly prized either by high-born connoisseurs or humble kitchenmaids. Those who had once tasted coffee prepared by their own hands from the powder of beans which they had themselves roasted, would neither mistake for it nor prefer to it the drink prepared by pouring the essence of Mr. Chicory into boiling water. The mass of the people had yet a recollection of what stout, tea, and coffee really were, and could conscientiously be left umpires of the doubts of their tongues and other senses.

But when the practice of giving professional testimonials comes to be applied, as has been done by Dr. Hassall in the case of the Invigorative Essence, to matters about which the public must necessarily remain in ignorance, when particular kinds of known medicines or of unknown nostrums are held up to public worship and purchase as the restorers of health in the most fatal diseases, as the guardians of youth and strength against the aggressions of disease and age, with such support as the name and testimony of a registered Medical Practitioner necessarily involve, it becomes the duty of every upright member of the Profession to denounce such a practice, and to use his utmost endeavours to bring it to a speedy termination.

THE WEEK.

The subject of Registration has been brought prominently before the public, through that strange romance of real life, the affair of Mr. R. Guinness Hill. He is alleged to have offended against the 41st Section of the Registration Act (6 and 7 William IV., cap. 86), which enacts, "That every

person who shall wilfully make, or cause to be made, for the purpose of being inserted in any Register of Births, Deaths, or Marriages, any false statement, touching any of the particulars hereinbefore required to be known and registered, shall be subjected to the same pains and penalties as if he were guilty of perjury." The question of the imperfect registration of births has also attracted attention, for it is well known that a certain number always escape registration, some from wilful concealment, some from carelessness; and as the former are mostly illegitimate, it is evident that without them we have not full statistical data respecting an important branch of public morality. A writer in the *London Review* sagely proposed that Medical men shall be compelled, under a penalty, to give notice—without fee—of every birth at which they may have attended. We do not think that our Profession will relish being made to divulge particulars of cases in which secrecy is stipulated for beforehand; and if such a law were passed, which is not likely, it probably would be a dead letter. At present the father or mother of every child born, or in case of their death, illness, absence, or inability, the occupier of the house, is required to give information, "upon being requested to do so," to the Registrar, according to the best of his or her knowledge and belief. But no special penalty is attached to refusal. No body can be buried without a Registrar's certificate that the death has been registered, or without a certificate from some Coroner; or, if such certificate be not produced, the person who buries the body must within seven days give notice to the Registrar, under a penalty of £10. So soon as a death is registered, the Registrar is compelled, without fee or reward, to deliver to the undertaker, or other person having charge of the funeral, the certificate necessary for that funeral. If the death be registered, this certificate must be given. With regard to the mode of registering deaths, the following are the official instructions issued to all Registrars (*List of Churches and Chapels, etc., corrected to January* 1, 1861):—

"With regard to a death [the Registrar must inquire] whether the last illness of the deceased were attended by a duly-qualified Medical Practitioner. If it were, and no certificate of the cause of death be produced, the Registrar will request the informant to endeavour to procure one. As it is of very great importance that true descriptions of the cause of death should be inserted in the Register, every endeavour ought to be made to obtain Medical certificates. But if the informant *requires* the Registrar to enter a death for which no Medical certificate is produced, the Registrar will not be justified (Registration Act, Clause 42) in refusing to do so."

It hence appears that the Medical Practitioner is under no legal obligation whatever to give a written certificate of the cause of death; although we think he is under a moral obligation, as a good citizen, to do so. But the Registrar may refuse or omit to register a death if he have "reasonable cause;" and we know that it is the custom of most Registrars, when information of a death is brought to them, respecting which violence or unfair play is suspected, to send the particulars at once to the Superintendent-Registrar, or to the Coroner. In this case, therefore, the Registrar would refuse to register, unless the Coroner declines to hold an inquest; and, of course, would refuse a certificate until the death be registered.

The Governors of the Bristol General Hospital have had their attention directed to the number of persons who avail themselves of the privileges of that Institution, although they have not the plea of poverty. Two valuable Scholarships have been founded for Medical students, and a premium for good nursing is awarded to such of the nurses as deserve it. The Rev. Canon Guthrie and his family are the donors. The following communication well deserves notice:—

"I send you the accompanying report of the proceedings at the Bristol General Hospital, reference being made therein to the abuse of that charity by persons who ought not to seek its benefits. Not only in this city, but also in Medical Charities generally, I have personal knowledge that the abuse in question exists on a very extensive scale; and it cannot be doubted that its existence is known, in almost every case, by the subscriber who supplies the recommendation note, the member of the Hospital Committee who accepts and passes the note, or the Medical man under whose care the patient is placed. I have known Medical officers surreptitiously admit well-to-do patients, who had either failed in their endeavours to obtain admission notes, or, having succeeded in procuring notes, had been subsequently rejected as 'unfit' by some member of the House Committee appointed to regulate the admission of patients. Our Medical Charities should afford relief to persons one remove only above pauperism, and yet they teem with patients in comfortable circumstances, to the serious detriment of the *really* poor, the sacrifice of their own independence, the fraudulent use of charitable money, and the grievous injury of that large class of Medical men who do not belong to Hospitals. From my experience of the working of five Medical Charities, I am of opinion that *some* members of the Staffs of Hospitals are more to blame for the admission of improper patients than either the subscribers or Committee. It is evident enough, where self-interest predominates, that the admission of respectable patients is likely to be more remunerative indirectly, than the admission of the friendless poor. In another way also the admission of persons in comfortable circumstances is sadly hurtful to the real ends of charity, for they almost always receive conspicuous preference over those on whom the smiles of Fortune have ceased to shine! The Bristol General Hospital is a modern Charity; and it is to be hoped that such men as the honest and energetic Canon Guthrie and Mr. W. M. Clarke (Surgeon to the Charity) will not permit the establishment of such a vicious precedent within its walls."

The trial of "Doctor" David Griffiths Jones took place at the Old Bailey, on the 25th inst. He pleaded "guilty" to the charge of perjury in having sworn that he was a Doctor of Medicine of Aberdeen, and that he had gone to Aberdeen and been examined there; and the charge of forgery of the will of the late Sophia Bellis, was withdrawn, with the opinion of Justice Byles that the evidence did not support the charge. The observations made by Serjeant Parry on behalf of the prisoner, are curious. "The prisoner," he observed, "had pleaded guilty to a charge of perjury; but the actual offence as it appeared to him, was of the most trivial description, and it merely consisted in his having sworn that he had obtained a degree at the College of Aberdeen, when, in point of fact, he had not done so. The prisoner was, however, a Member of the Royal College of Surgeons of England, and an Aberdeen degree was of such small value, that only a few years ago they were openly sold and bought." Mr. Justice Byles said that all these facts, if they were to be urged in mitigation of punishment, ought to be placed upon affidavit, and the counsel for the prosecution ought to have an opportunity of answering them. Mr. Serjeant Parry said that this should be done.

The papers of the last fortnight are unusually destitute of topics which interest our Profession. We may mention, however, one case in which a woman, detected in the act of uttering a bad half-crown, swallowed the coin, spite of the efforts of a constable to prevent her, and thus showed her faith in the peristaltic action of her viscera.—A poor man's daughter was driven to suicide by destitution, he being unable to support her because one arm was paralyzed by some substance which he had used in his trade as a composition doll maker.—A child, aged four years, died a few days since at

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Rayne from the rupture of an intestine, caused by her having swallowed the extraordinary number of 180 Mazagan beans. A post-mortem examination revealed the singular fact, and many of the beans were found to be of such immense size, that it was difficult to conceive how the child could have swallowed them whole.—A poor illegitimate child who had been placed with his mother's sister to be taken care of, was rescued from death by starvation by the Hon. and Rev. Mr. Grey, the Rector of Morpeth. It was excessively dirty and emaciated; and although five years and nine months old, weighed but 17 lbs. 1 oz., after ten days of warmth and nourishment in a Workhouse, he weighed 20 lbs. 5 ozs.—Sir Henry Bulwer's valet has destroyed himself after that style of strangulation, in which the Turks are adepts,—"A cord had first been put round the neck, and attached to a walking-stick, when the deceased twisted the stick round and round till suffocation ensued." The poor man's brain had suffered after typhus fever.—Mr. G. Flint, Surgeon, of Buxton, shot his wife in open day in the public street, on Thursday, September 19. The unfortunate lady received several wounds in her back from small-shot, but they are not considered dangerous. Habitual intemperance is supposed to be the cause of the crime, and the prisoner, when examined before the magistrates, was utterly inebriate, and in a state verging on delirium tremens.—A man has committed suicide at Paris, because he had travelled all over the earth, and left himself nothing new to see, and could no longer restrain his curiosity to see the "other world."—A lunatic has died at Colney-hatch Lunatic Asylum of ulceration of the duodenum, following a scald of both feet. The poor fellow was ordered a warm bath; the attendant put in the hot water first; the lunatic stepped in whilst the attendant's eye was directed some other way, and so he was severely scalded. Lunatics, like children, are safe so long as closely watched, and no longer.—A farmer who left his little boy in a field to gather blackberries, on returning found him hanging from a gate, quite dead, with his head between two of the bars.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE USE OF THE THERMOMETER IN PRIVATE PRACTICE.

By Professor WUNDERLICH.

In a former volume of this Journal (a) we presented the abstract of a highly interesting communication from Professor Wünderlich, in which he called attention to the great importance of many of the deductions derivable from the thermometer as regards the detection and treatment of disease. In the present paper he observes that, although thermometrical observations are now conducted in various Hospitals, the necessity and practicability of introducing them into private practice is doubted by many persons. Such doubts can only be entertained by those who have not made themselves acquainted with the value of this wide field of observation. Any one who has become accustomed to this mode of investigation regards the daily employment of the thermometer as almost indispensable, seeing that in acute and in many chronic diseases it imparts a certainty attainable by no natural penetration and no other mode of investigation. To such a person it seems incomprehensible how fever patients can be effectually treated without a knowledge of the condition and variation of their animal temperature. The following are the chief practical points adverted to by the Professor:—

1. The normal temperature of the human body, at completely sheltered parts of its surface, amounts to 29·5° R. (98·5° F.), or a few tenths more or less. The presence of this normal temperature is not a security for health, but any notable deviation from it—*i.e.*, an elevation above 30° or a depression below 29°—is always a sign of disease. 2. The deviations from the normal temperature are never causeless or without signification. They are, on the one hand, the results of determinate accidental influences on the body, and, on the other, of the production of processes of diseases within the body. 3. The normal temperature of healthy individuals is well nigh invariable. The manifold influences to which the body is exposed, so long as they do not give rise to disease, scarcely cause a variation of half a degree; and the maintenance of the temperature under these circumstances is the proof of a healthy constitution. A healthy man, whether fasting or digesting, drinking water or stimulating fluids, employing mind or body or in a state of listlessness, always retains his temperature unless his health becomes disturbed. Even the taking of medicines or the loss of blood will exert but little influence. In sleep the temperature of a healthy man is somewhat lower, but even then does not sink below 29° R. Although we cannot say that the possession of a normal temperature is a certain sign of health, yet its maintenance under these various influences gives a complete assurance of the absence of anything beyond mere local and unimportant disturbance. 4. Variability of animal temperature through external influences is a sign of disturbed health. Influences which exert no effect upon a healthy man, act most strikingly in certain abnormal conditions of the body. The appreciation of these accidental fluctuations in the temperature is a means of ascertaining or confirming the existence of otherwise latent disturbing processes. Many men, apparently healthy, carry in their bodies the germ or the remains of disease, while the most careful investigation may fail to detect anything abnormal. Nevertheless, such persons are in no inconsiderable danger, for by want of precaution disease may unexpectedly arise. So in incomplete convalescence, both patient and practitioner may be thrown off their guard, and the simplest precautions become neglected, which, had their necessity been known, might have warded off a recurrence of disease. As long as such persons are in a state of repose, their temperature may remain unchanged; but no sooner do they become disturbed by some excess in diet, a slight increase in the number of stools, a small loss of blood, etc, than the temperature at once undergoes a considerable elevation (to 31° or higher). 5. The deviations from the normal temperature observed in diseases are stable in proportion to the typical character and full development of such diseases. Yet in these we may have also accidental increase and decrease of the temperature proper to the disease brought about by accidental influences; but such instability is only temporay and of short duration. For example, the temperature proper to the disease may be lowered under the influence of bleeding, epistaxis, the relief of constipation or retention of urine, of profound sleep, etc.; and it may be raised after transport and other disadvantageous influences. But any such alterations, unless they are dependent upon a change in the diseased process itself, will become effaced within twelve or twenty-four hours. This fluctuation, too, is far less considerable than is that of the frequency of the pulse, or other means of judging of the condition of the patient. 6. Although not the only one, the temperature of the body is in most cases the most certain means of measuring the general condition of the patient, and its consideration is, therefore, indispensable for an accurate prognosis. 7. The temperature in disease may be normal, lower, or higher, and it may be unequally distributed over different parts of the body. 8. The normal temperature in disease is only a relative sign. Of itself it excludes certain forms of disease. Compared with former elevation or depression, it shows that an interruption to the course of the disease has taken place or that the patient is approaching recovery. 9. A sensitive thermometer placed in the axilla, will, if there is considerable elevation of temperature, rise above the normal temperature within the first minute, and will exhibit the actual temperature in five minutes. If it be warmed in the hand to 29° before applying, the indication may be obtained in one or two minutes. Besides the goodness of the thermometer and certain other subordinate circumstances, the quickness of the rising depends upon the height of the existing temperature; so that from observation of the rapidity with which the column rises we are enabled in half a minute to form an approximative judgment of the amount of rising to be

(a) *Medical Times and Gazette*, vol. xxxvii. p. 639.

expected. 10. The increase of temperature is usually observed in connexion with changes in the sensations of the patient (as languor, chills, fever, thirst, headache, etc.), and with increase in the quickness of the pulse. Still a considerable increase of temperature (2° or more) may occur in a state of apparently good health, the pulse being still normal. Elevation of temperature is, therefore, a more decided sign than is the feelings of the patient, or the conditions of his pulse. There are many cases in which the Physician without his thermometer could have no idea of the presence of fever. Several hours prior to the paroxysm of ague the temperature commences rising, and frequently when the disease seems to have completely disappeared, an increase of temperature reappears periodically, unaccompanied by any other symptom. So long as this continues to be the case, the patient is only apparently cured. In relapse of typhus the rise of temperature will indicate what is about to happen three or four days before any increase of pulse or other sign of mischief has been observed. In tuberculosis it is the temperature alone which will frequently show that no arrest in the process has occurred. In many apyrexial diseases, and in every description of convalescence, the thermometer is the earliest of means for the indication of the development of complications. 11. The amount of increase of temperature is usually proportionate to that of the increase of the pulse, and the other signs of general disease. Yet is this agreement frequently in part or wholly wanting. In the cases in which a disproportion exists between the elevation of temperature and the other febrile symptoms, it is the former, almost without exception, which is to be relied on. 12. A single observation of an abnormal increase of temperature, whether this be great or small, does not alone lead to any conclusion as to the nature of the disease. It shows that the individual is suffering from disease ; that when it is considerably raised, he has fever, and that, when a great height is reached, that he is in a state of imminent danger. 13. Taking into consideration the other conditions of the patient, a single observation of abnormal temperature sometimes enables us to determine the presence of certain forms of disease, or the absence of these when suspected. It is only rarely a diagnosis can be based upon a single observation. As an example, however, if a person who yesterday was healthy, and this morning exhibits a temperature of 33° or more, he is almost certainly the subject of an attack of intermittent ; so, when in a subject of measles, when, after the disappearance of the eruption, the temperature remains high, some complicating disturbance is present. 14. A single observation of the temperature will not unfrequently determine whether the diseased condition is one of danger or not. This must not be relied upon unaided by other means of diagnosis, as the observation may happen to be made during a temporary improvement or aggravation. This borne in mind, the author cites several examples, in which an important conclusion may be drawn from a single observation. Thus, a temperature of 32° and above indicates the gravity of a pneumonia, a dangerous complication in rheumatism, and the commencement of puerperal inflammation. 15. The temperature proper to the various forms of disease does not remain completely equable during the twenty four hours. Such daily fluctuations are in part dependent upon general rules, and in part determined by the nature, stage and degree of the disease, or upon the increase or diminution of this. In general, in non-intermittent febrile affections, the temperature is less high in the morning than in the evening—the difference being commonly about half a degree. A difference of a degree may be of little consequence when the evening temperature does not rise to or only a little above 32°, while the morning sinks to 31°, but if the latter is already high (32°) and the former rises a degree higher still, very intense disease is indicated. The retention of the same temperature from morning to evening is in general a good sign, while when it continues the same from evening till morning it is a bad one. A fall in temperature from morning to evening is a pretty certain sign of improvement, while a rise is a sign of getting worse. A fall of half a degree from morning to evening is a more certain sign of improvement than a fall of one and a half degree from evening to morning. 16. Accidental deviations from the usual daily course of temperature in febrile diseases may be brought about by many circumstances, the most common of which are, the occurrence of complications and sudden aggravation of the disease, constipation, purging, emptying a distended bladder, loss of blood, transport, errors of diet, influence of medicinal agents, and a favourable crisis of the disease. 17. The uninterruptedly regular observation of the progress of the temperature throughout the whole course of the disease, furnishes the most important indications for the judgment of febrile affections.

(To be continued.)

EXCERPTA MINORA.

Case of a Needle Imbedded in the Breast.—M. Dolbeau related a case to the Anatomical Society of a woman who complained of a painful tumour of the breast about the size of the end of the thumb, and which on pressure imparted a distinct feeling of crepitation. Believing he had to do with a painful cutaneous fibroma, he proceeded to its removal, but after the incision of the skin, it appeared much less circumscribed than might have been expected, and in the midst of the cellular tissue a small needle was found, which had become surrounded with plastic lymph, constituting the tumour. This is a case which shows the importance of the precept laid down by Nélaton, viz. that when ever in the examination of a patient we meet with a strange symptom, all our attention should be concentrated upon that symptom. Had the crepitation felt here, and probably due to friction against the cartilages of the ribs, been more attentively considered, a more accurate diagnosis might have been made. A similar mistake occurred to M. Velpeau, who proposed the removal of what he considered to be a scirrhous tumour of the breast, M. Ricord, however, while examining the tumour felt something pricking his finger, and the extraction of a needle was the only operation required.—*Bulletin de la Soc. Anat.*, Vol. v. p. 350.

Poisoning Noxious Animals.—On account of the numerous accidents which have occurred from using arsenic and phosphorus for this purpose, M. Sevérin Caussé, at the request of the French Government, has been pursuing a series of investigations with the object of devising some means of poisoning which should be as efficacious and more safe than those in use. As general principles he lays down these rules :—1. That we must not risk mistakes by employing the poison in the form of biscuits, pills, or powder ; 2. An excipient must be used which is repugnant in taste to man but not to animals ; 3. Emetic substances should be added, so as, in case of the poison being swallowed accidentally, vomiting may be produced, which it is not with gnawing animals like rats and mice ; 4. The substance should be easily detectable by chemical analysis ; 5. The composition he finally recommends as the best suited as a destructive agent, consists of tallow 786 grammes, tartar emetic 153 grammes, and euphorbium 51 grammes. These, mixed with a pinch of aventurine (added for facility of detection in case of human poisoning), by the aid of 10 grammes of cotton, are made into thirty-two candles, each of which would suffice to poison several rats or mice.—*Annales d'Hygiène*, Vol. xv. p. 425.

On the Comparative Increase of the Two Extremities of the Long Bones.—As the result of experiments upon animals, M. Ollier comes to the conclusion that the humerus increases more by its upper than by its lower extremity, while the radius and ulna increase most by their lower extremities. In the lower limbs the relations are the reverse of this, for the lower extremity of the femur increases more than the upper, the reverse of this being the case with the tibia. These results are of some consequence as regards resection and amputation in young subjects. Thus resection of the articular extremities at the elbow does not induce a very considerable arrest of development. since it is at their opposite extremity that the bones which constitute the joint chiefly increase. In the knee such arrest is much more to be feared, as it is at the ends forming the articulation that the tibia and femur most increase. For the same reason, and the proportion taken into account, excision of the shoulder exposes to more shortening than that of the hip, and excision of the wrist more than that of the ankle.—*Comptes-Rendus*, Vol. lii. No. 4.

Diseases of Watchmakers.—Dr. Perron, of Besançon, where there are more than 3000 persons engaged in the manufacture of watches, in this paper adverts to the mischief which accrues from the constant manipulation of copper. His conclusions are as follow :—1. The molecular absorption of the salts and oxides of copper gives rise to gastric irritation, diarrhœa, fever, etc.—in fact, to the symptoms of poisoning all but in degree. 2. Successive slow poisonings of this kind derange

the health of the workman, and powerfully predisposes him to phthisis (a disease of frequent occurrence among the Besançon watchmakers). 3. They require him to take corporeal exercise, carried even to fatigue, and justify the frequent employment of evacuants and sudorifics. 4. Manipulations of copper or other metals should be interdicted to thin and excitable persons of a dry, bilious temperament, and who have any congenital or acquired predisposition to phthisis. 5. This affection is best prevented by the use of succulent aliments, and tonic drinks, the thorough ventilation of the workshops, great cleanliness, frequent tepid bath, wearing the moustache, etc.—*Annales d'Hygiène*, Vol. xvi. p. 104.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

GERMANY.

Breslau, August 25.

THE JUBILEE OF THE UNIVERSITY—(*Continued*).

On the evening of August 2, a social gathering of residents and visitors took place. Amongst the Medical celebrities who were present, I may mention Professor Lafaye, of Christiania, well known by his researches on syphilisation; Staatsrath Tiedemann, of St. Petersburg—a quondam German "lad;" the anatomist, Meyer, of Zurich; the physiologist, Von Siebold, of Munich; Professor Halla, of Pragne, who is Editor of the *Prager Viertel Jahrsschrift*; and M. Purkinje, who has for many years been a very successful teacher at this University. At nine o'clock all went to the University to which, at the same time, an immense torchlight procession proceeded through the gaily-decorated and crowded streets. Having arrived there, the leader of the procession gave three "Hochs" for the University, which were heartily responded to. The principal festivity, however, took place on August 3, which day has always been celebrated here as being the birthday of the founder of the University, Frederick William III. In the forenoon a picturesque procession, which seemed to carry us back to mediæval times, proceeded with bands of music, from the Rathhaus to the University. It consisted of the Professors of this and other Universities, deputations, chief magistrates, and the students, all in gala costume; the gowns and barrets were of a magnificent description, although of a most grotesque form and colour. As usual, the Catholic Faculty had the precedence, and as its Professors are also members of the Church, great pomp was displayed by them. The Evangelical Faculty then followed in violet colours; the Law in crimson, Medicine in purple, and Philosophy in dark blue. A few *Rectores Magnifici*, who were also present, appeared in special splendour. The procession at last arrived at the large aula of the University, which was not half large enough to contain all those entitled to be present; in fact, not one of the Physicians or students of the town, with the exception of such as were delegates of corporations, were admitted. This insufficiency of space had chiefly led to the discord that had existed before the festival, between the Senate and the students, the latter of course wishing to participate unconditionally in all the festivities. Under the circumstances this was, however, impossible, unless another building had been chosen, and this would, of course, have detracted from the academical character of the Jubilee. An oration was then delivered by the Rector Magnificus, the first scholar of the University and Professor of Philosophy. The oration was most eloquent and gave an historical account of the development of the University, in which he laid particular stress upon its having been famous in the struggle for political and religious liberty, which took place in the commencement of the present century. After the war of liberation all who belonged to this University, had for some time acted harmoniously together; but when the first excitement had passed off, the old controversies broke out with renewed violence. There is scarcely another University in which so many internal and all but suicidal struggles have taken place; but on the whole it cannot be denied that it has always remained faithful to the standard of liberty.

On August 3 a grand dinner was given, and a telegraphic congratulation from the Crown Prince of Prussia arrived from Osborne just when the cloth was withdrawn. In the evening two students' "commerces" were held, one by the "Association of Lads," and the other by the "County Corporations," where the highest spirit prevailed. The following day was fixed for the proclamation of the honorary degrees to be given on this occasion. The Medical Faculty gave very few, and those only to foreigners, although many natives had hoped to be presented with it; the reason for not giving any to the latter being, that every Medical man in Germany is already M.D. Among the honorary M.D's created was M. Delarive, of Geneva, for his work on electricity; M. Quetelet, the Director of the Observatory of Brussels, for his meritorious statistical researches; Professor Fechner, of Leipzig, for his researches on the physiology of special sense; Mr. Charles Darwin, F.R.S., F.G.S., "originis specierum in regno animalium ac vegetabilium investigatori sollertissimo, viro doctissimo, de zoologia et de physiologia comparata generali egregie merito;" and Professor Duflos, of this city, for his valuable researches on toxicology and pharmaceutics. Finally, the Upper President of the province of Silesia, who is at the same time Curator of the University, received (odd enough) the degree of M.D., after having before been proclaimed LL.D. It was said in the diploma, that he had shown himself a clever Physician in averting dire calamities from the University. The degree of Ph.D. was given to Mr. John Stuart Mill, for his works on Political Economy; to Mr. William Dwight Whitney, Professor at the University of Newport (America), for his researches in Sanskrit literature, to Thomas Henry Huxley, "Professor in schola rei metallicæ Anglica," F.G.S, for his merits in palæontology, to M. Charles Daremberg, superintendent of the Bibliothèque Mazarin at Paris, for his merits in philology and the history of Medicine, shown by his editions of Hippocrates, Oribasius, and other authors. The same degree was also given to two German anatomists, Professor Henle, of Göttingen, and Reichert of Berlin.

The official festivities were now at an end; but the popular element only began its pranks. For three days successively no end of processions and *kneipereien* (drinking bouts) took place. A solemn procession of the Corporations, to which amongst others the Duke of Brunswick-Oels, whose country seat is near Breslau, sent his carriages surpassed in elegance and splendour everything of the kind that had previously taken place here. It was preceded by two large bands of music on horseback and in mediæval costume. On August 5 the town gave a festival to natives and strangers, at which oceans of beer and mountains of comestibles were abolished with astounding rapidity. The chief feature of this festival was the fraternisation of all classes of the population, and the memory of it will long live in the minds of all who were present.

Bonn, September 1.

EARLY TRACES OF PATHOLOGICAL ANATOMY.

At a recent meeting of the Society of the Lower Rhine, Professor Mayer, the senior of the Medical Faculty of this University, gave an interesting account of the earliest traces of diseases and malformations in man which are on record. According to the myths of Asiatic and Greek priests and poets, a cyclus of gods preceded mankind and co-existed with it in the beginning. The Bramins believe the world to have existed four millions of years, and assume three ages before the present one, which began 3102 B.C. Hesiodus gives a similar account of four periods of the world, and thus laid the foundation for the later fables of the golden, silver, brass, and iron ages current amongst the western nations. Malformations were already present in the gods of the Greeks and the Egyptians. Hephæstos was ugly and lame; Thoth, the Mercury of the Egyptians, was dwarfed, and Typhon red-haired and grey as an ass. The Chaldeans believed that a fish-like man, Paunes, was the first teacher of mankind. Berosus says, that, according to the documents in the temple of Belus in Babylon, men were at first born with two heads, two or four faces, genitals of each kind, horses' heads, and limbs and tails of different animals. It is obvious that these ideas of Berosus are not only the offspring of the imagination, as Cuvier believed them to be, but that they have their origin in the monsters which were born then as now, and which are incapable of an extra-uterine life. From such occurrences the fables of Cyclopes, Janus, Sirens, etc., took

their rise. The French encyclopædists first asserted that man was an offspring of the monkey; and even now many philosophers are inclined to assume this proposition. This fable is indigenous with the Kalmucks. In the Ramajana of the Indians, a King of Monkeys is mentioned, who with his people assisted Rama to recover his wife from Ceylon. The age of Rama is supposed to be about 3250 years B.C. Mr. Darwin, who in our time, has as it were, renovated the fable of Berosus, will, perhaps, be compelled to assume a previous Geno Homo Sinus, which would at a later period have become specified in monkey and man. It must not, however, be forgotten, that before Mr. Darwin published his work on the Origin of Species, A. Wagner and Von Baer had pronounced a similar theory of the origin of species from united genera, in the memoirs of the Academy of St. Petersburg. But neither the history of antediluvian zoology nor tradition leads us to suppose such composites, with the exception of such animals as exist even now, as, for instance, the ornithorrhynchus and others. Man is not the offspring of the monkey, but was man originally, although of course different, according to latitude and meridian, to zone and country.

That diseases existed among the ancients is evidenced by the myths of Chiron, Æsculapius, etc. M. Lyncell says that 3125 B.C. Athothes, the successor of Menes, was a Physician and wrote books on Anatomy. Bruysch discovered a book of prescriptions written in the time of Rameses II. (1489 B.C.) The Egyptians embalmed acephalous children, and malformed individuals were held in veneration by the Greeks and the Scyths. Erichthonius, King of Athens, is said to have invented the three or four-wheeled carriage, he being affected with club-foot. Among the Greeks before Troy, the ugly and malformed Thersites is often mentioned.

The oldest diseases of mankind spoken of are leprosy, pestilence, and insanity; the latter in Egypt 2500 B.C., the former 1500 B.C. The first system of Pathology was founded by Hippocrates and his school, 460-360 B.C., but malformations were little considered in it. The latter are first described in a work of Manethon, "Apotelesmaticorum libri six," in the time of the Ptolemeians, probably 280 B.C., which has hitherto been entirely overlooked by the writers on the History of Medicine. It contains astrological hints on the constellation of stars, and their relation to the fate of man. Thus Manethon says, the constellation of Saturnus with Mars, and Venus in opposition, is fraught with mischief, as hermaphroditic children are then born; if Saturn consumes Luna near the zodiacus, diarrhœa is the consequence, and children are born whose bones are dislocated by water, and who are sure to die. Wasting of the liver, the spleen, and the kidney is also consequent upon it. But if Luna comes in together with the fierce Mars, or the terrible Saturnus, premature births are the consequence, and the children are formed like animals. If Mars rises in the east, late births take place, and if Saturn rises while Venus descends, sterile children are born. Other constellations give rise to hairy children, to catalepsy, lameness, twins, triplets, children without limbs, weakness, podagra, and somnambulism.

Wurzburg, August 29.

ON PERFORATION OF THE MASTOID PROCESS.

The indications for the operation of perforating the mastoid process in *otitis interna*, are not yet so firmly established as is the case with other operations. It was, perhaps, too frequently and indiscriminately done at first, and afterwards entirely rejected and considered illegitimate, although there can be no doubt, that cases occur in practice, in which the operation ought to be performed in obedience to the fundamental principle, that every accumulation of pus in the tissues is to be evacuated as soon and as completely as possible, in order to prevent its noxious effects upon the neighbouring parts, and a further spreading of the inflammation. The tissues adjoining the mastoid process, viz., the dura mater, the carotis interna, the vena jugularis interna, and the sinus transversus, are so important that a morbid process which spreads to them from the middle ear, is fraught with danger to life, independently of the circumstance that the sense of hearing may be weakened or even entirely annihilated by the presence of pus in the middle ear. Dr. von Troeltsch, the well-known aurist of this University, believes the disinclination of Surgeons to act in this instance in accordance with the principle just announced, to be due to their considering diseases of the ear as exceptional complaints for the treatment of which special rules are required. Dr. von Troeltsch, however, strongly objects to such reasoning. The cells of the mastoid process are in open communication with the cavity of the tympanum; they are covered with the same mucous membrane, and participate in all the affections of that cavity. Pus accumulates the more readily in these cells, as their communication amongst each other and with the anterior part of the middle ear, is often very narrow, so that the pus is easily shut in, besides which a large portion of the mastoid process lies deeper than the membrane of the tympanum, and the meatus auditorius. The membrana tympani may therefore be perforated, and the secretion of the cavity of the tympanum may be allowed to freely escape outwards; and this will, nevertheless, not provide an outlet for the pus within the mastoid process. If the matter which is accumulated there does not spontaneously make its way outside, by the formation of a fistula behind the ear, which sometimes occurs, the Surgeon has no choice but to break through the external layer of the bone, in order to gain access to the seat of the pus; so much the more as the introduction of warm vapours into the Eustachian tube has no decided beneficial effects in severe cases, although in mild forms of this affection frequent gargling and repeated blowing in of air into the tube, by means of a catheter, may serve to prevent the case from getting worse, and may act favourably altogether. If the bony layer which has to be perforated is very thin and fragile, an ordinary buttoned probe will answer the purpose; but if such is not the case a hollow chisel ought to be used for it. Dr. von Troeltsch also says that in every case, an incision, about an inch long, behind the ear, and parallel with the concha, ought to precede the perforation of the bone, as laid down by Dr. Wilde, of Dublin. Such an incision always produces a favourable result; the bleeding being considerable. The chisel should then be inserted in the middle of the incision, at an equal height with the opening of the ear, and ought to be carried horizontally and a little forwards. In this way the dura mater and the sinus transversus are avoided, and the Surgeon rapidly arrives in the large cells which are close above and behind the cavity of the tympanum. The incision itself had best be made three to four lines behind the insertion of the concha, as, if it were made further forwards, the posterior auricular artery or its branches might be wounded; and if the incision is made further back, there is the danger of touching the sinus transversus with the chisel. The instruments must of course be used very gently, and with interruptions, in order to allow of cleaning the wound and probing, just as during trepanation, and also to avoid a sudden piercing of the bone.

The first proposal to do this operation was made by Johannes Riolanus (1649) and Rollfink (1656), who recommended it for deafness and noises in the ear, caused by obstruction in the Eustachian tube. Valsalva, in 1704, made injections through a fistulous opening which existed behind the ear; and J. L. Petit was the first to perform perforation of the mastoid process by means of a hollow chisel and a hammer. The patient's life was saved thereby. Dr. von Troeltsch knows altogether of eight cases of this operation, all of which took a very favourable turn, so that the operation is evidently not so dangerous as it is reputed to be. The second case occurred in the practice of Jasser (1776); his patient was a soldier who had for several years suffered from pain in the ear, suppuration, and deafness. A slight prominence having been formed behind the ear, Jasser made an incision one inch long behind the ear, after which very little pus came away, and it was only when he had penetrated with the probe into the cells of the mastoid process that much matter was evacuated. The pain in the ear then ceased at once, and never returned; the deafness was improved. The other mastoid process was also pierced in this patient with a trocar, for deafness, not for pain, and the hearing got better. The operation was now called "Jasser's operation." The third case is that of Fielitz. A young girl lost her hearing on one side, in consequence of an acute disease, and suffered for five years, at intervals, from an offensively-smelling discharge from the ear, which was always preceded by fever and severe pain in the ear. The mastoid process was pierced with a pointed instrument, and injections were made, after which much pus escaped. The discharge

gradually ceased, and the hearing became completely re-established.

The fourth case is that of a patient under the care of Weber (1824). A peasant had suffered for three months from a very painful suppurative otitis, and as an incision behind the ear did not mitigate the pain, a trocar was thrust, three lines deep, and obliquely forwards, into the highest prominence of the mastoid process, ten lines behind the ear, seventeen lines from the upper and four lines from the posterior edge of the mastoid process. Much pus came away; the pain disappeared immediately; the suppuration ceased four weeks afterwards: and a complete cure was the result.

The fifth case is that of Forget (1849). A young man became affected with otitis interna in consequence of a cold; copious suppuration in the ear set in, accompanied by paralysis of the facial nerve; but the latter disappeared a year afterwards. Two years after the commencement of the illness, the patient became completely deaf on this side, and the neighbourhood of the ear was greatly tumefied. The mastoid process was then pierced by means of a hollow chisel, and much pus escaped. A month afterwards a sequestered bone, three centimètres high and two centimètres thick, was removed, and from that time the patient began to improve, the suppuration ceased, and the hearing returned.

The sixth and seventh cases occurred in the practice of M. Follin, of Paris (1859). In both cases there was a fistulous opening, which was dilated by that Surgeon by means of the trephine; six weeks afterwards the cure was complete. The eighth and last case is one of Dr. von Troeltsch himself (1860). A girl, aged 10, complained the second day after the eruption of the scarlet rash, of violent pain in both ears, which continued to increase until the fifth day, and then began to diminish, in consequence of a discharge from both ears having set in. The fever took its regular course. The discharge from both ears continued, and after some time the pain became again severe, especially behind the right ear, where a slight swelling was also seen. Three weeks after the commencement of the illness, the pain became most intense, and was accompanied with headache and deafness. Pressure on the mastoid process augmented the pain; the skin on the right side was slightly reddened and the whole neighbourhood behind the ear, and the upper and lateral region of the neck were diffusely swelled. Both meatuses were filled with thin pus, after the removal of which their walls appeared to be tumefied; and in the background a drop of water was seen pulsating—an evident sign that both membranæ tympani were perforated. Injections of lukewarm water were then made four times a-day; and after the injection, a weak solution of acetate of lead (five drops to one ounce) was dropped in; while mercurial ointment was rubbed in, round and chiefly behind the ear. During the next few days the discharge was not lessened, and the pain very much increased, the swelling behind the ear became more considerable, was very painful on pressure, and felt œdematous; no fluctuation was perceived.

Six days afterwards, an incision, one and a-half to two inches long was made behind the insertion of the concha and parallel with it down to the bone. The bleeding was profuse, and pus apppeared immediately afterwards in the level of the external opening of the ear. In the evening after the operation violent pain was felt in the wound, but no longer in the ear; there was no fever. The swelling behind the ear became less on the following day, but again increased on the second day, when the pain also became more violent, and the discharge less abundant; on pressure behind the ear, pus escaped from the meatus. Two days afterwards Dr. von Troeltsch tried to penetrate the incised wound, which had already become narrowed, by means of a buttoned probe. In this he succeeded only for three lines and he therefore continued perforating with the probe, and afterwards placed a piece of charpie as deep as possible into the opening. Soon afterwards much pus, at first thin and afterwards thick, escaped from the opening while only a trifling quantity was discharged from the meatus. On the next day the patient felt better, the pain had entirely disappeared, and the hearing was improved. Injections were now made daily; the probe could penetrate an inch deep and the injected water escaped through the meatus, until about two months afterwards all discharge had ceased, and the recovery was complete. The girl died eighteen months afterwards, of tuberculosis of the lungs.

The post-mortem examination showed the following condition of the organ of hearing:—On the right mastoid process a cicatrix was seen, which corresponded to the incision, and from this proceeded a canal in the mastoid process, with smooth walls, in the form of a cone, with its base behind, passing from behind forwards, four millimètres long, and closed inside. The external meatus was not pathologically changed. The mucous membrane of the tube was pale and covered with a little mucus; the narrowest part of the tube was abnormally dilated; its osseous part was cylindrical and also dilated. The posterior half of the membrana tympani was wanting, except a small strip behind and above. The anterior part of the hole was drawn inwards, and grown together with the opposite wall of the cavity of the tympanum. The manubrium mallei was drawn inwards, and firmly soldered to the wall of the labyrinth. The cavity of the tympanum, therefore, consisted, properly speaking, of two parts, the anterior of which, lying before the manubrium, was connected with the tube, the posterior with the meatus. There was no communication between these two parts, so that water injected through the meatus did not penetrate into the tube. The posterior half of the cavity of the tympanum which communicated with the meatus was also completely closed, posteriorly and superiorly, towards the mastoid process. The stapes was grown together with the upper part of the perforation, but it was moveable, and its joint with the crus of the incus was not severed. The malleus and incus were also moveable. Between the head of the malleus and the ostium tympanicum of the tube there was a firm and strong band, horizontally situated, which contained the tendon of the tensor tympani muscle. This band connected the inner and the outer wall of the cavity of the tympanicum, and communicated with the exudations separating the cavity of the tympanum in two halves.

At the left side the meatus did not contain any abnormal secretion. The upper part of the tube was abnormally dilated. The posterior half of the membrana tympani, close to the manubrium of the malleus, showed an indented perforation of the size of a grain of hemp, the posterior edge of which was grown together with the opposite wall of the cavity of the tympanum and with the capitulum of the stapes. A series of rather succulent adhesions connected the upper and anterior part of the membrana tympani with the tendon of the tensor tympani muscle and the opposite wall of the labyrinth. A thin but firm adhesion was seen backwards. The mucous membrane of the cavity of the tympanum was thicker, softer, and contained more blood than usual. All the ossicules were freely moveable. The cells of the mastoid process were fine, its meshes filled with a reddish-yellow liquid, which only contained a few small cells with several nuclei and exudation corpuscles. The history of this case gives another striking proof for the fact, that very considerable changes may take place in the membrana tympani, and, nevertheless, the hearing of the individual concerned may not be seriously affected.

Leipzig, August 29.

THE HOMŒOPATHIC CONGRESS.

On the 10th inst. the annual Congress of the Central Union of German Homœopaths, which was founded as far back as 1829, on the occasion of Hahnemann's Doctor's Jubilee, took place here. The proceedings of this year's congress were not of a very remarkable kind. The chair was taken by Dr. Müller, who gave a sketch of the doings of previous Homœopathic congresses; after which Dr. Meyer gave a report on the Homœopathic Clinique of this city, in which 941 patients have been treated during the last year, amongst whom were 742 cured, 115 improved, and 7 deaths. Since the existence of this clinique, altogether 26,168, patients have been treated in it, according to Homœopathic principles. Nürnberg has been chosen by acclamation as the seat for next year's Congress, and Dr. Grauvogel has been entrusted with the management of it. Fame is silent on Drs. Meyer and Müller, who played so important a part in the proceedings of the Congress just come to an end; but Dr. Grauvogel has made himself remarkable by a pamphlet lately published by him under the title, "The Homœopathic Law of Similarity: an Open Letter to Baron von Liebig." In this very amusing little book the author, who is not called Grauvogel (Grey-bird) for

nothing, displays the mite of wisdom conferred on him by his god-mother Minerva. He leads Baron von Liebig, as well as Professor Virchow, with the most perfect *sang froid ad absurdum*, and peremptorily challenges both these gentlemen to refute his arguments, if they can! No doubt Homœopathy will again come victorious out of this (one-sided) fight, since Baron von Liebig, as well as Professor Virchow, are of opinion that it would be dangerous and foolhardy to enter the lists against the irresistible Grauvogel, who may, therefore, justly claim the champion's belt. *Palmam qui meruit ferat.*

ON THE CHANGES OF TEMPERATURE IN TYPHOID FEVER.

Some time ago your correspondent at Jena gave you an account of the researches of Professors Traube, Uhle, and Thierfelder, on the changes of temperature in certain acute diseases; and to-day I intend following up this matter by giving you the results of the observations of Professor Wunderlich on the same subject, which have extended over 700 cases.

According to this observer, typhoid fever has two perfectly distinct stages, which may be recognised by means of the thermometer. In the former of these, infiltration and exudation takes place, in the latter we have retrogressive metamorphosis, elimination of the morbid matter, and healing of the diseased parts. Besides these two periods, the thermometer can show several other points in which a change in the general condition of the patient takes place, which are not accompanied by anatomical changes. It is thus possible to show that periods of the disease are not of variable length, but have a fixed duration, and that in regular, or nearly regular cases, the time in which the change in the general condition takes place, is equivalent to the end or the middle of the disease. Typhoid fever is, in fact, a typical disease, bound to a certain course, and only slightly influenced by accidental circumstances; and it is distinguished from every other disease by its type. There are, however, irregular cases, which are due to certain causes, and which cannot exceed certain limits. The more perfectly the normal type of the disease is exhibited in an individual case, the more certain is a spontaneous cure of the complaint. Every irregularity ought to excite our suspicion, especially if it is dependent upon notoriously dangerous influences. Anomalous cases may be apparently milder than those which are regular, but the improvement in them must be more considerable, more decided, and more permanent, if the issue is to be favourable.

The period of exudation and infiltration extends, on an average, over two weeks; in mild cases, one and a-half; in severe, two and a-half, and sometimes even three weeks. This period is again to be divided into the initial stage, which lasts three or four days, and in that of the acme, which fills up the remainder of the first period. The duration of the period of retrogressive metamorphosis and healing differs very much according to the extent of the anatomical lesions; it may be a week, and it may be six weeks, or even more. There are, however, two essential differences in the course of typhoid fever: one set of cases is of a mild form, the stage of acme lasting only one to one and a-half weeks, exceptionally two weeks, that is, at most until the eighteenth day of the illness; the stage of retrogressive metamorphosis then follows in a very decided manner, and lasts for one or two weeks; so that the whole illness lasts from three to four weeks, and in very favourable cases only two and a-half weeks. Then we have another set of cases of typhoid fever, the severe form, in which the period of infiltration lasts longer, and that of retrogressive metamorphosis commences with severe symptoms of fever, the stage of acme extending over two to three and a-half weeks, and being in many cases followed by an intermediate or "amphibolous" stage, during which an uncertain improvement, and unaccountable relapses are observed. This stage is of uncertain duration, and it may end fatally, or even not appear at all. If the case takes a favourable turn, then a stage of decided remission follows, which lasts at least a week, and is followed by the feverless stage (two weeks and more). The whole illness lasts, therefore, if the patient recovers, from four and a-half to ten weeks.

Within the first week the thermometer is often able to render the diagnosis certain, if other symptoms cannot do so, as the temperature rises in the following characteristic manner:—In the first half of the week it augments from morning to evening to 1° R. (2·25° F.), and from the evening to the following morning it falls ½° R (1·1° F.), as is shown in the following table:—

INITIAL STAGE OF TYPHOID FEVER.

	Morning.	Evening.
First day ..	29·5° R. (98·3° F.)	30·5° R. (100·6° F.)
Second day ..	30° R. (99·4° F.)	31° R. (101·7° F.)
Third day ..	30·5° R. (100·6° F.)	31·5° R. (102·8° F.)
Fourth day ..	31° R. (101·7° F.)	32° R. (104° F.)

In the second half of the first week, the evening temperature remains at 31·7° R. (103·3° F.), generally 32° R. (104° F.), and more; while the morning temperature is ½° R. less. *There is no typhoid fever* when the temperature rises to 104° F. on the first or second day of the illness; when the evening temperature in a child or an adult person does not rise to 103·3° F. between the fourth and sixth days; when during the second half of the first week a considerable or progressive decrease in the evening temperature takes place. On the other hand, if the case is apparently one of a mild indisposition, we may, by finding the temperature permanently increasing, especially in the evening, be led to assume the existence of typhoid fever.

Regarding prognosis, the thermometer does not give us a decided clue during the first week. Only if the case is going to be very mild or very severe, we find a very moderate, or an enormous increase of temperature accordingly. In many instances the other symptoms may be very mild, but a considerable increase of temperature will excite our suspicion in the very beginning, so that we may recognise great danger at once. Irregularities in the course of temperature during the first week are always a very bad sign; and the thermometer is the only means which can show us during the first week the favourable or unfavourable working of a spontaneous occurrence or of a certain influence brought to bear upon the patient.

During the second week the diagnosis may be rendered certain by means of the thermometer alone. There is no typhoid fever, if the temperature is, on one or several evenings between the eighth and eleventh day of the illness below 103·3° F.; on the other hand, no acute disease excepting typhoid fever is likely to show during the evenings mentioned a continual temperature above 103·3° F., and if this should be the case, there will be other striking symptoms which will render the diagnosis very easy. The thermometer at the same time shows the form (mild or severe) of the disease and its probable course, at a time when no other symptom can give a decisive clue in this respect. If the second week appears favourable, the third week will be still more so, and the convalescence will begin in the latter or at all events in the fourth week. If, on the contrary, the second week is severe, there will be no decided improvement in the third, and the course will be very dangerous. It is a most favourable symptom when the evening temperature in the second week varies from 103·3° F. to 104° F.; when the morning temperature is 1° to 2° lower, when the exacerbation does not commence before ten o'clock a.m., when the remission sets in before midnight, and when all these occurrences are repeated every day in a similar manner; or when a very slight diminution of temperature (½° to 1° F.) is perceptible during corresponding hours from day to day, or when on the eleventh, twelfth, and fourteenth, a considerable remission is observed. If, on the contrary, the morning temperature in the second week remains constantly at 102·8° F., and the evening exacerbation reaches, or rises above 104·6° F., when the exacerbations set in at an early hour and extend beyond midnight, and if there is no remission in the middle of the week, the prognosis is bad.

Every irregularity in the second week is awkward, temporary remissions as well as exacerbations. In such cases the further course of the disease is also generally irregular; and although the disease may sometimes rapidly heal, even under these circumstances, relapses, fresh exacerbations, complications and hypostrophes are of more frequent occurrence. It is also an especially unfavourable sign when there is no trace of remission in the second week, even if the morning temperature does not exceed that of the evening. It is a certain sign that the course will be very severe if the morning temperature is at or above 104° F., and if the evening is at 106° F., especially if the increase is considerable towards the end of the week; and it is a most dangerous sign if these symptoms alternate with sudden remissions.

In the third week the diagnosis can always be made for certain by means of the thermometer, and mild cases are most accurately distinguished from severe ones. In the former there are now larger remissions in the morning, the temperature being 3 to 4° F. lower than in the evening, and sometimes even going down to its normal average; while in the evening, it also rapidly diminishes, and in the middle of the fourth week it becomes altogether normal.

In the severe form there may be either remissions, so that although the fever is still of a continuous character, the temperature is no longer so high as it was in the second week, but is about 1° lower; this is the most favourable turn, and large remissions will then generally follow in the fourth week. Or the temperature remains as high as it was in the second week, or becomes even higher; in this case there is great danger; the fourth week will then be severe, generally irregular; and if the patient holds on through this, decided remissions will commence only in the fifth week. Or there may be irregularities in the course which render the prognosis doubtful.

From the third week the measurement of the temperature is in all cases the most distinct guide for recognising a regular course,—variations and disturbances, the commencement and progress of improvement, the favourable or evil effect of influences, occurrences and medications, the entrance of sudden danger, the arrest of healing, the renewed increase, relapses, complications and hypostrophes.

The approach of death is more certainly shown by the state of the temperature than by any other symptom. There is either an unusual increase of temperature (above 106°) in the period of acme, or there is a sudden increase of temperature to 108° or more; or there is a sudden and very considerable fall of temperature (96° F. and below), together with great collapsus; or there is in the period of healing a decrease of temperature, which is in contrast with the other symptoms.

The entrance of perfect convalescence can only be assumed when there is no longer any increase of heat in the evening. This is the only certain way of determining this point, and any noxious effect of diet, etc., may be most rapidly and securely recognised by finding a new augmentation of heat.

MEDICAL INSTITUTIONS OF THIS CITY.

Independently of the Cliniques of the University, there are other Medical Institutions in this city, which owe their existence to voluntary contributions, and which are in a very flourishing condition. Amongst these I may mention the Institute for the Treatment of the Diseases of the Eye, which was founded forty years ago by Professor Rittrich, and in which during the last year, 2307 patients were treated, and 334 operations were made, amongst which were 62 for cataract. There is a stipend connected with this Institution for the support of poor patients suffering from diseases of the eye or the indigent blind. There is also a special Institute for the Blind, in which a large number of them are boarded and lodged, and which recently received from a wealthy citizen a legacy of £15,000. An Obstetrical Institution, which was founded some time ago by private means, and which provided Medical help, midwives, and money for pregnant and parturient women, has recently been united with the University, which now possesses a stationary and an ambulatory obstetrical clinique.

MANCHESTER.

(From our own Correspondent.)

September 20.

I THINK that a very fit and appropriate subject for my first communication, will be a short history of the Medical Charities and Societies of Manchester, including also those institutions the objects of which, though not professedly Medical, still bear more or less directly on Medical matters. Although the Medical Charities form no inconsiderable proportion of the numerous public institutions which testify to the munificent liberality of the city, still I find, on referring to the reports published by each, that the majority are restricted in their operation and good work for want of funds. This appears the more remarkable in a place so distinguished for enterprise, wealth, and generosity, as Manchester. We have the Royal Infirmary, St. Mary's Hospital, the Eye Hospital, the Salford and Pendleton Royal Hospital and Dispensary, the General Hospital for Sick Children, the Lock Hospital, the Chorlton-upon-Medlock Dispensary, the Ardwick and Ancoats Dispensary, the Ear Institution, and the Clinical Hospital. Besides these we have a Medical School, a Collegiate Establishment known as Owen's College, a Literary and Philosophical Society, a Medical Society, Medico-Ethical Association, and Obstetrical Society. First in the order of foundation is the Royal Infirmary, established in 1752, a noble institution situated in the heart of the city, on an elevated piece of ground which is laid out in grass plats, intersected with gravel walks. This stately building is of mixed architecture, and consists of three sides of a quadrangle. In the centre of each side is an elegant portico supported by four fluted pillars of the Ionic order. In the front is a spacious esplanade, adorned with colossal statues of Watt, Dalton, Peel, and Wellington, and two fountains. The centre of the building is surmounted by a magnificent dome, which serves as a chamber for a very superior clock, having four illuminated dials. The internal accommodation is of the most perfect kind. A reference to the last Report shows that there were 25,557 patients treated in one year, 4634 of these being accidents. The wards are furnished with 277 beds, 1200 cubic feet of air being allowed for each; these were occupied by 2204 patients, at a weekly cost of maintenance for each patient of 8s. 2d.

Next in order comes St. Mary's Hospital for the Diseases of Women and Children, founded in the year 1790. The present handsome and commodious edifice was built in 1855, and calculated for the accommodation of 100 patients; fifty beds being devoted to women, and fifty to children. The internal arrangements and appointments of the Hospital are excellent. The wards are lofty and well ventilated. Those intended for women are the smallest, in order to allow of the separate investigation and treatment of uterine diseases, and difficult and dangerous cases of midwifery. The children's wards are larger; connected with this Hospital are a valuable library and museum, both the munificent gift of Dr. Radford. The latter contains the finest collection of contracted pelves in the world. I find that the number of patients admitted last year was 4667. Of these, 3078 were out-patients; home patients, being pregnant cases, 1243; home patients, not pregnant, 202; in-patients, 144.

The Eye Hospital was established in 1815. From the importance that diseases of the eye have attained, and from the fact of ten per cent. of the cases admitted being the result of accident, we can appreciate the usefulness of an institution like this in a manufacturing district. The report states that 2227 patients were treated in this institution last year, of which number 123 were operated upon successfully for cataract and artificial pupil.

Salford and Pendleton Royal Hospital and Dispensary was established in 1827. This institution is situated in the borough of Salford, and is a neat brick-building with a very handsome stone portico. The number of patients treated by this institution during the year ending July, 1860, was 5761, of which 41 were in-patients and 791 were cases of accident.

The General Hospital and Dispensary for Sick Children was established in 1829, and up to a recent period was situated in North Parade, St. Mary's. In the year 1859, the present more commodious premises in Bridge-street were rented, altered, and adapted to the purposes of an Hospital. The number of patients admitted during the year ending January, 1861, is stated as amounting to 4142.

It remains briefly to notice the following institutions:—The Chorlton-upon-Medlock Dispensary, established in 1826. The number of patients admitted in 1860 was 2872. The Ardwick and Ancoats Dispensary, established in 1828. The number of patients admitted for the year ending June, 1861, was 3982. The Lock Hospital, established 1819, is situated in Deansgate. The objects of Lock Hospitals are such as to need no special description. This Hospital afforded relief last year to 1069 applicants, 17 of whom were in-patients. The Ear Institution, established 1855. The Clinical Hospital. Two of these are situated in the localities indicated by their titles. The Ear Institution is in Oxford-street, and the Clinical Hospital in Stevenson's-square.

I have not been able to find any statement of the number of patients admitted during the last year by the two last-named institutions.

The Royal School of Medicine and Surgery, Pine-street.—To Manchester belongs the honour of having formed the first

Provincial School of Medicine. In the year 1824 an attempt was made by Mr. Turner to combine the exertions of individual teachers in one complete system of Medical instruction, and in 1825 the School of Medicine and Surgery in Pine-street was fully organised. In 1835 his Majesty William the Fourth was graciously pleased to bestow his patronage on this school in consideration of its being the first school embracing instruction in the several branches of Medical science that was formed in the provinces; and it enjoyed the honour of being named the Manchester Royal School of Medicine and Surgery, in Pine-street. It still sustains its former high reputation, being carried on with great energy and spirit. Its founder, Mr. Turner, still occupies the chair of anatomy and physiology, in conjunction with Mr. Wm. Smith.

Owen's College, in connexion with the University of London.—This College is instituted for the purpose of general academic education, the courses of lectures which bear upon Medical education are those on natural philosophy, natural history and chemistry. Suitable courses of lectures are also given, by which students may be prepared for passing the Oxford Middle-class Examination, and the matriculation of the London University, both of which are recognised by the Medical Council as evidence of previous education.

The Literary and Philosophical Society, established in 1781, has been long distinguished by its excellent volumes of Transactions, the importance of which has led to their being translated into several foreign languages. A very considerable number of these excellent papers will be found to be on subjects connected more or less directly with Medical science. Dr. Dalton, one of the most distinguished philosophers of any age or country, was a member of this Society, and for many years its President, and it has been the medium of communicating to the world his achievements in science. The room occupied by him as a laboratory during more than forty years, was long carefully preserved in the state in which he left it.

Exigencies occasioned by want of space, have since led to the removal of the apparatus to a glass case, where it is still carefully guarded.

The Medical Society holds its meetings monthly, when papers on Medical subjects are read and discussed. It possesses an excellent and copious library, and the library table is well supplied with the periodical Medical literature.

The Medico-Ethical Association was instituted in 1848, "To frame a code of etiquette for the guidance of its members, to decide upon all questions of usage or courtesy in conducting Medical practice, to support the respectability and maintain the interests of the Profession, to promote fair and honourable practice, etc."

This was the first of the Medico-Ethical Associations which have now become so numerous.

The Obstetrical Society.—On reference to the columns of this Journal, I find that this Society holds its meetings at St. Mary's Hospital.

The Manchester and Salford Sanitary Association.—Among the benefits conferred by this Association, may be enumerated the investigation of public sanitary nuisances. The giving of popular lectures from time to time on sanitary subjects, the issuing of tracts on sanitary subjects, the issuing of special reports when deemed necessary on sanitary subjects, the publishing of a weekly return on the health and meteorology of Manchester.

(*From our Special Correspondent.*)

September 12.

In my last communication (a) I concluded by a reference to the paper on sudden change of colour in the human hair, by the President of the Physiological Section, Dr. John Davy, I propose now to continue my narrative by describing the other papers read during the sittings; giving a correct view, as far as I am able, as an observer, of the points of chief interest to the Medical commonwealth. A paper was read on Thursday, from Dr. Kidd, on Chloroform Accidents. The object of this paper was to show that in cases of death under chloroform the arrest of life commences in failure of the respiration, and that in suspended animation from the narcotic, artificial respiration is the means mostly to be relied on. A paper was communicated from Dr. Robinson, of Newcastle, "On the Connection between the Functions of Respiration and of Digestion." Dr. Robinson essayed to prove that respiration is the cause of acidity and of the acid stomachic secretion. In young rabbits destroyed before respiration is set up, the reaction of the juices of the alimentary canal is alkaline, but in rabbits newly born and allowed to respire, the alkaline reaction is quickly removed, and free acid is thrown out. Dr. Robinson's paper was calculated to afford much light on the connection of various forms of indigestion with abnormal states of the respiratory organs, and to explain the sudden good effect of change of air and of pure air on persons of dyspeptic taint.

Professor H. Muller communicated an essay "On the Existence and Arrangement of the Fovea Centralis Retinæ in Men and Animals."

Lastly, on the fast day of the sub-section, Dr. Edward Smith and Mr. Milner, of Wakefield, read the preliminary half of their report on Prison Dietary and Discipline, or to give the exact title of their paper, "On the Influence of Prison Dietary and Punishments upon the Bodily Functions of Prisoners." The authors remarked on the differences which existed in different prisons in respect to the quantity of food supplied, the amount of nutriment, and the various kinds of labour under particular dietaries to which prisoners are subjected. They then proceeded, after very close arguments, derived from a series of carefully observed facts, to show that the weight of prisoners is much below that of persons of the same age and weight in a state of freedom, and that loss of weight during imprisonment is the natural sequence of prison discipline. Milk, it was proved, arrested waste, while tea rendered the waste more marked.

The continuation of their report on prison dietary and labour formed the first business of the Section on Friday. Dr. Smith read, while Mr. Milner illustrated, the statistical facts in tables drawn out at the moment of reading. The authors detailed their observations as to the effect of prison dietary on the excretion of urea, urinary matter, fæces, and chloride of sodium. The results, which had obviously been obtained at great cost of labour, led the observers to certain very conclusive arguments against the present systems of punishment adopted in prisons. The time they thought was come when a system should be abolished which, practised in the extreme, leads to loss of vital power, and at a vast expenditure of money supports a dietary which is far beyond that supplied to the poor in workhouses, and that obtained by the working classes generally, fails to secure the object it is intended to carry out.

On the question of low diet as applied to prisoners, the author contended that notwithstanding all directions to the contrary, of a legislative kind, low diet is used virtually as a means of punishment in prisons; and they protested against the principle of treating prisoners in such way that when they left gaol they were less able to earn a livelihood than when they entered. The conclusion of this valuable report was devoted to considerations respecting the value of different articles of food, and of the physiological truths which could be gleaned from the facts which a reformed prison discipline could supply to the scientific learner.

After both readings animated debates followed, in which Dr. Davy, Mr. Ker Porter, Dr. Mouatt, Professor Bain, the Reverend Mr. Butler, Dr. Rolleston, and Mr. Milner took part. In the course of the debate, it was suggested by Professor Bain that the administration of unpalatable food should be employed as a means of punishment in prisons. To this Mr. Milner made a strong objection, and added that as a Medical man he thought whipping was a better punishment, and less hurtful, than imprisonment in a dark cell and a diet of bread and water. At the end of the debate a resolution was carried to the effect that the Sub-Section recommended the printing of the entire report, "both on account of its intrinsic value, and as a guide to others in conducting the same inquiries."

Dr. James Turnbull followed next with a communication "On the Physiological and Medicinal Properties of Sulphate of Aniline, and its Use in the Treatment of Chorea." The author supplied the formula for the preparation of the sulphate; noticed its value commercially in the production of colouring substances or dyes, and detailed cases of chorea in which after every other remedy had failed, success followed the administration of the salt. The dose was from one to two grains. A debate again followed, in which it was stated that

(a) See page 284.

aniline, undergoing oxidation in the system, produces a blue colour of the nails, lips, and hands.

Mr. Toynbee, F.R.S., delivered a demonstration "On the Action of the Eustachian Tube in Man." The facts were given extemporally, but with great precision and simplicity. The argument was that the Eustachian tube is always closed except during the act of deglutition. In proof of this, Mr. Toynbee showed that by filling the mouth and chest with air, closing the mouth and nostrils, and forcibly injecting air, a peculiar sensation of fulness is produced in the ear, due to the pressure on the tympanum by air inclosed in the tympanic cavity. This sensation of fulness continues until an act of swallowing was accomplished, upon which the Eustachian tube being opened the air escaped, the pressure was removed, and the oppression relieved. Mr. Toynbee next exhibited the same fact by reference to the application of the otoscope invented by Dr. Politzer.

The proceedings of this day in the Physiological Section were wound up by a paper, or rather a discourse, by Professor Remak of Berlin, "On the Influence of the Sympathetic Nerve on Voluntary Muscles, as witnessed in the Progressive Muscular Atrophy by Electric Currents." The learned Professor's exposition was received with marked attention, but owing to the abstract nature of the argument, it did not excite any notable discussion.

We must not omit to notice that on this same day Dr. W. Roberts, the indefatigable Local Secretary, submitted to the Chemical Section an admirable experimental paper "On the Solvent Powers of Weak and Strong Alkaline Carbonites on Uric Acid Calculi." Dr. Roberts showed that alkaline carbonate solutions could be made, which possessed the power to dissolve the calculi to a very considerable extent, but unfortunately for practice, the solutions as thus prepared were too active, chemically, to be applied by injection in the case of the human subject suffering from calculus, the solutions having a destructive action on mucous membrane.

At the commencement of the third sitting of the Physiological Sub-Section, Mr. Robinson read a paper on the "Occipital Vertebræ in Osseous Fishes," after which a paper by Dr. Beale was read, entitled, "The Structure and Growth of the Elementary Parts of Living Beings." The matter put forward in this paper was a condensation of the recent views enunciated by Dr. Beale and already recorded, in great part, in this Journal.

Three points seemed to obtain most attention in the discussion: 1. The point relative to the relations of germinal and formed material. 2. The question of development of the nucleus of the cell. 3. The order of growth. At the close of the reading, Professor Remak of Berlin made an energetic opposition to the views of Dr. Beale, asserting, in the words of Blumenbach, that "What was true was not new, and what was new was not true." Dr. Rolleston defended our English Physiologist, and Dr. Roberts explained that Professor Remak had misunderstood some of Dr. Beale's positions.

During the period in which the above was taking place, Mr. Fawcett, in the neighbouring Section, was regaling a crowded audience with a discourse "On the Method of Investigation Pursued by Mr. Darwin in his Researches." The rumour that Darwin was under criticism had the effect of drawing away many of the visitors from the other Sections, and the Physiological Room was nearly emptied. Dr. Davy's paper on "Changes of Colour in the Human Hair" excited a counter-interest, and in the course of the debate which followed, the attendance greatly improved.

At the close of this last-named debate, Dr. Richardson took up the subject of "Resuscitation," and as this paper had been looked for with expectation, members began to crowd into the Section, until at last the room was entirely filled: as the subject was carried on step by step the interest it excited became general. Dr. Richardson first touched on the few historical facts relative to resuscitation. He then defined death from a physiological point of view; next he deseribed the forms of death in which attempts at resuscitation were advisable; and, lastly, he passed to the consideration of methods of resuscitation. These were four in number. 1. Artificial respiration; 2. Galvanism; 3. Injections of fluids into blood-vessels; 4. Artificial circulation. Of artificial respiration the author showed conclusively that the process could only be of service when the heart was still acting. But he also showed that so long as the heart had not ceased, so long, by sustaining respiration, could life be kept up, even in the presence of volatile poisons which would otherwise prove instantly fatal. He showed further that in cases of asphyxia the advantages of an air heated to 130° for the purpose of artificial respiration were enormous, and suggested that in every receiving-house for the drowned a heated air bath should be always ready and at hand. Passing from artificial respiration to galvanism, Dr. Richardson said, taking it all in all, that galvanism was a dangerous remedy, inasmuch as the application of the current quickly exhausted muscular power. The remarks on galvanism were followed by some notices on the injection of the arterial system with fluids of different kinds, and it was explained that so long as three hours after death muscular contraction could be excited by the mere injection of warm water into the arterial system. In some instances, too, reflex movements could be excited. In the end, the Author described, under the title "Artificial Circulation," a series of original researches by which he had endeavoured to set the blood in motion in the subject recently dead, by supplementing mechanically, for a brief period, the forcing power of the heart. His researches in this direction, while they did not profess to be perfected, went to show that if a simple and inocuous method for artificial circulation could be applied, resuscitation would follow in a large number of cases at periods previous to coagulation of the blood or the occurrence of putrefactive change.

In the debate that followed, Professor Simpson, Dr. Priestley, Dr. C. J. B. Williams, Mr. Royle, and others took part. Drs. Priestley and Simpson coincided entirely with the Author relative to galvanism, and Dr. Simpson in earnest terms commended the author to push his inquiry onwards to completion. Dr. Williams, while admitting that galvanism exhausted muscular power, held that, applied judiciously, it might be useful as a stimulant; and Mr. Royle adduced an instance which remarkably illustrated the value of heated air in cases of apparent death from immersion in water. At the close of this discussion, the Physiological Section adjourned.

While these proceedings were in progress, two or three other papers were being read in different sections, on both of which it is our business to treat. In the Chemical Section, Dr. Moffat contributed a valuable essay on "Atmospheric Ozone." Dwelling on the relationships which exist between the presence or absence of ozone in the air, and the presence or absence of particular diseases, Dr. Moffat remarked that in a medico-meteorological sense he was not prepared to state that atmospheric ozone produces any disease, but he had no hesitation in saying that it prevents diseases of the epidemic character by removing their causes. The *maximum* of deaths take place while the wind is in the north points. By far the greatest number of diseases, however, take place in the north-west and south-east points, or at the commencement of ozone periods, and these are chiefly affections of the nervous and the muscular systems; from which it would appear that derangements of the nervous and muscular forces take place at the time of transition from the non-ozone and positively electric, to the ozone or negatively electric current of the air. These results were deduced from 2727 cases of disease, and 1149 deaths which took place at Hawarden in ten years. Dr. Moffat also communicated some facts on "Sulphuretted Hydrogen as a Product of Putrefaction," in which he maintained that this substance was a true derivative of the putrefactive process.

In Section E—Economic Sciences and Statistics—Miss Louisa Twining read a communication on "Facts and Statistics about Workhouses." The authoress proposed that in every workhouse reports should be annually published, containing accounts of the numbers and classes of the inmates, the length of time they had been inmates, and the causes of the deaths that had occurred. This would give all the information so much required, but of which nothing now came to light, respecting the mortality of infants and children in workhouses. As illustrating the importance of inquiries of this kind, Miss Twining pointed out how large a population of helpless poor was concerned. On January 1, 1861, in 646 unions and workhouses in the United Kingdom there were 113,507 inmates, of whom 30,654 were children in pauper schools. The whole number of in-door and out-door poor was 850,896, and of those who were called able-bodied 40,000 were males, while above 110,000 were females. But those who paid rates for the support of this population of poor, ought to know how

their money was applied, and the results of their payments, facts which up to this time were only known correctly to the Union Medical Officers and Boards of Guardians. Miss Twining's paper, which was in truth a good suggestive essay, supplying a large amount of positive knowledge, blended with all the gentle feeling which would be expected from an educated and sensible lady, was received with much applause; but for some inexplicable reason, the President ruled that the questions it suggested were not suitable for discussion in his Section.

(To be concluded.)

LIVERPOOL.

September 16.

There are few questions less inviting, though there are few more important in reference to public health, than those which refer to the extent and the character of venereal disease as it comes under observation in great towns. Are these maladies on the increase?—are they undergoing any modification in their type? These are queries the answers to which would have no little value in relation to social as well as to Medical science. With regard to this town, though I cannot pretend to be able to pronounce a very confident opinion, I think that I can offer you some facts which may help towards the solution of these questions.

In the Northern and Southern Hospitals no primary cases of venereal disease are received, unless they happen to occur in foreign sailors, whose board, etc., are paid for by their Consuls. In the Southern Hospital there are frequently cases of secondary syphilitic eruption, periostitis, etc. At the Northern even these cases are, as far as possible, kept out.

The Royal Infirmary, having the Lock Hospital in Ashton-street attached, of course transfers to it all venereal cases; so that this Hospital and the Lock wards of the Workhouse are the only places where we can expect to find those who are unable to procure attendance at home, and are too ill to go to the Dispensaries. They may thus be reasonably supposed to furnish a sample, so to speak, by which we may judge approximately as to the amount and kind of disease prevalent in the town.

In the Ashton-street Hospital, which is under the care of Mr. Worthington and Mr. McCheane, the patients are at least one step above absolute destitution, since the rule requiring decent clothing on admission, and a supply of clean linen during the patient's stay in Hospital, excludes those who are actually in rags and filth. Such find a refuge in the Workhouse, into which many are admitted in so miserable a condition that every stitch upon them has to be burnt as speedily as possible.

At Ashton-street fifty beds are provided; and during last year 391 patients were received. This year a larger proportion have been admitted—334 up to September 12, against 260 during the corresponding period last year. The male and female patients are generally about equal in number at Ashton-street. In the wards of the Workhouse the female patients largely out-number the others. The early age of some of the female patients especially, at both places, is shocking: patients have been admitted only thirteen years of age, and those between the ages of fifteen and seventeen are not uncommon.

With regard to the prevalent forms of the disease, the most noticeable fact is that in the parochial Lock wards, where we might expect the most formidable cases, among those who come from the vilest holes and corners, and in whom the effects of drink, and dirt, and want, are superadded to those of their disease, there is an almost entire absence of sores which show a tendency either to slough or to extend rapidly; nor are these cases common at Ashton-street. Thus, on going round both Hospitals on the same day, there were but two cases—out of an aggregate of about seventy patients—in which there was sloughing. One, a man in Ashton-street, in whom nearly the whole glans had been destroyed; the other, a woman in the same Hospital, who had had a sloughing bubo, but was well enough to walk about. During the whole of August, there were admitted into this Hospital seven cases of gonorrhœa in the male, complicated with swelled testicle in two instances, and with bubo in three. This disease in the female seems almost always associated with sores, and only one case of simple gonorrhœa appears to have presented itself. Of the various forms of syphilitic sore, there were twelve cases among men, and thirteen among women. Three cases of various abscesses; six cases of secondary disease, all females; one case of simple swelling of the labia, one man with warts, and one with diseased testicle. In the same period there were admitted at the Workhouse, twenty-eight women, principally suffering from slight sores and gonorrhœa; the number of men is uncertain, as they are not registered separately from the other patients.

The worst cases that have occurred in these wards during the past twelve months, have been women with abscesses burrowing about the perineum, one very bad case of sloughing extending over the groin on both sides; and a few cases of severe ulceration of the soft palate and fauces, which in two instances extended into the larynx and occasioned such interference with respiration, that the patient's life was placed in the utmost peril. The first of these, a woman, aged 45, the mother of four children, and a hard drinker, was admitted into the lying-in ward; she had considerable dyspnœa before her labour came on; this was somewhat relieved by hot fomentations and stimulants, and she was delivered speedily and safely; but a few hours after, the obstruction to the breathing became suddenly aggravated, no air entered the chest, her pulse was imperceptible, and her extremities cold. Tracheotomy was performed, and she rapidly rallied. Her breathing remained free, but her strength failed, and she sank about forty-eight hours after the operation. A post-mortem examination showed commencing pleuro-pneumonia on both sides; the epiglottis almost gone, and extensive ulceration and thickening, extending as low as the chordæ vocales. The second case, a woman, aged 51, was in almost as imminent danger as the preceding, though she came under observation before she had become so much exhausted. In her case laryngotomy was performed; her breathing was at once restored, and she has now recovered, retaining still, however, some huskiness of voice.

As to the treatment in vogue in Liverpool, I should perhaps mention that blue pill, grey powder, the iodide or the bichloride of mercury, are moderately employed in the treatment of both primary and secondary syphilis. At Ashton-street, fumigations with the vapour of cinnabar or calomel are used with the best effect in secondary disease. I need hardly say, however, that a large proportion of cases are treated with the iodide of potassium, iodide of iron, etc., without any aid from mercury.

For the treatment of gonorrhœa, with or without sores, in the female there is a contrivance in the Lock Wards of the Workhouse which was introduced, I believe, at the suggestion of Dr. Ayrton, by which vaginal injections are given very easily and efficiently. It consists, firstly, of a reservoir capable of holding about eight ounces of fluid, which is joined at its base by two pipes, one containing hot, the other cold water; from the summit of the reservoir there passes off a long india-rubber tube fitted with a nozzle. Before it is used, a bag, containing sulphate of zinc and alum, or any other salt which it may be thought desirable to administer, is placed in the reservoir; the patient sits in a bath close at hand, and when the water is turned on it of course carries with it in solution the salt contained in the reservoir; while the force with which the water is propelled being much greater than that which is likely to be used with any ordinary injection apparatus, the parts are washed out far more efficiently than is commonly done. The constant use of the warm bath has, it seems, a more directly curative effect than is generally recognised. This much is certain that, since these means have been efficiently carried out, the time during which the patients remain in the ward has been remarkably diminished. I have not been able to ascertain the exact numerical difference between the average number of patients in the Lock Ward during the present and past years, but I am informed that some three or four years since the number was sometimes as high as eighty, and scarcely ever lower than forty, while at present it seldom rises above fifteen. It should be mentioned, however, that this very remarkable difference is due partly to a decrease in the number of admissions, as well as to the reduction of the average time of the patients' stay. But even this decrease in the number of applications is a most important fact, since there has been no commensurate increase in the patients at Ashton-street; for although there is an increase there this

year, there was none last year, although the difference at the other Hospital was as marked then as it is now; and as it is evident that the class of patients who formerly crowded the Parish Lock Ward must, when too ill to follow their unholy calling, do one of two things,—go to the Workhouse or starve,—it is, I think, only fair to infer that there has been in this town a perceptible diminution in the amount of disease among the lowest class of prostitutes, and a decided mitigation in the type of the disease itself.

At the Dispensary attached to the Lying-in Hospital, as well as at the other Dispensaries, a good deal of infantile syphilis is found, and I have no evidence to prove any diminution of these patients. In these cases the plan of mercurial inunction is, I believe, most frequently employed. I have seen, also, many cases successfully treated by the administration of the bichloride of mercury to the mother, and not giving any medicine to the child.

I may now leave this subject, and record some cases of interest of another class which have recently come under notice. A case of stone which occurred in Mr. Bickerseth's practice is interesting, on account of the difficulty which attended its diagnosis. The symptoms of stone were unmistakeable, and the sound introduced into the bladder seemed to pass over some firm, soft, though somewhat resisting body. On the performance of the operation the mystery was solved by the extraction of a stone completely encased in a firm coating more than the eighth of an inch in thickness, formed of extremely tenacious mucus and calcareous matter, which when recent was soft, but has now hardened into a layer, resembling the ordinary exterior of a phosphatic caculus.

At the Lying-in Hospital the operation of ovariotomy was performed by Dr. Grimsdale on August 27. The patient was 28 years of age, had been married four years, but was never pregnant. The tumour became perceptible two years ago, and on May 1, 1861, it was tapped, and about twelve pints of clear straw-coloured fluid with scarcely any solid matter evacuated. When thus emptied, there was nothing to be felt through the abdominal parietes but the collapsed cyst. Three ounces of a strong solution of iodine were injected into the cyst, and allowed to run out through the trocar. Very little local or constitutional disturbance was occasioned by the injection, and in about a month the cyst began to fill again, and it was determined to remove it. The operation was performed as follows:—An incision about four inches and a-half in length was made midway between the umbilicus and pubes, the cyst was carefully exposed, then tapped, and drawn through the wound in the abdominal parietes; its pedicle was secured by being tied with five separate ligatures, and subsequently transfixed by a harelip pin passing through it and the edges of the wound, which was itself closed by deep quilled sutures of iron wire, and harelip pins superficially. From the time of the operation the patient has progressed without a bad symptom. Four of the five ligatures securing the pedicle have come away, and the patient may now be considered out of danger. The full details of this case will, I hope, be hereafter published.

At the Infirmary last Thursday a man presented himself having his abdomen extremely distended and painful, and stating that he was kicked in the belly on Tuesday, and had been in pain and unable to make water since. The catheter being passed, the bladder was found empty. The patient sank the same night, and on a post-mortem examination the bladder was found separated from the peritoneum by a layer of recent lympth, as thick as the hand, but not the slightest laceration of the viscus could be detected, even when it was injected with water. There was, however, a rupture of the small intestine.

On the 21st of last month Mr. Bickersteth tied the femoral artery of a woman, aged about 22, for an aneurism of the left popliteal artery. The patient went on without a bad symptom till the 16th inst., when she suddenly died. A post-mortem examination showed the cause of death to have been the rupture of an aneurism, which was situated in the first part of the aorta. A portion of its parietes had become adherent to the pulmonary artery, and it appeared as if some suddenly exaggerated action of the heart had detached it from this union, and, in doing so, lacerated the sac. The blood flowed into the pericardium, from which about twelve ounces of clot were removed. The portion of artery which had been tied, and from which the ligature had come away, showed the clots above and below the part which had been included in the ligature, and the commencing obliteration of the vessel, remarkably well.

But I find that I must bring this letter to a close, not for want of matter, but for fear I should occupy too much of your valuable space.

GENERAL CORRESPONDENCE.

LACERATION OF THE PERINÆUM INTO THE RECTUM.

LETTER FROM DR. ROBINSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—For the treatment of injuries to the perinæum, whether recent or of long standing, which have originated from the parturient effort, so much has been successfully done within the last few years, by means of sutures and plastic operations, that it has become almost a fashion to use sutures immediately the accident has happened; but considerable manual skill is necessary to general success in these operations, and as all accoucheurs have not this accomplishment, it is some satisfaction to know that even extensive lacerations may be trusted to such means as encourage adhesion by "first intention" without operative measures, and the subjoined case is offered in support of this view.

In June I was called to the assistance of Mrs. F., a primipara, with rather fully developed osseous system, the head having been long delayed in its passage through the pelvis. I applied Duncan's forceps, and brought it through without much difficulty or delay, when the head was precipitately extruded before the forceps could be disengaged. The perinæum was not rigid, and offered no resistance. The fourchette suffered slight laceration from the passage of the head. Chloroform was administered during the operation by Mr. Frederick George, far short, however, of inducing insensibility. The passage of the shoulders was tardy, apparently from the large size of the child; it was not hastened by interference. The perinæum was now carefully supported, but in vain, the rent already begun was extended into the rectum, a space of at least two inches.

The plan pursued here, with the happiest result, was first introduced to my notice in a little pamphlet by Dr. J. Cockle, published some years ago, though I know not if he be the deviser, indeed much of it had been long practised. It consists in binding the knees together, to prevent motion of the parts, giving opium to maintain constipation, allowing but a small quantity of liquid food, as beef-tea, milk, occasional eggs, etc., so as not to load the alimentary canal, and render evacuation of it necessary, also frequently using the catheter. These means were assiduously carried out by Mr. George, who took charge of the patient. He also washed out the vagina several times a-day with a weak chlorinated soda lotion. After two days the binder was removed from the knees, it was so irksome to the patient, much wearied by the long labour, and she promised faithfully not to separate the limbs. She bore this rigid confinement, etc., with such resolution to aid in the cure, that it was continued for seventeen days, when a free examination showed the adhesions to be firm and complete; she was then allowed to get out of bed, the bowels soon acted of themselves with ease and comfort. She suffered some time on ascending stairs, that has passed away, and now, two months since the accident, she is quite well.

I am, &c.

THOMAS ROBINSON, M.D.

Lamb's Conduit-street.

ACCOUNT OF A MONSTROUS BIRTH.

LETTER FROM MR. ROBERT BLAGDEN.

[To the Editor of the Medical Times and Gazette.]

SIR,—If you think the following case of sufficient interest to the Profession, may I beg the favour of a small space in your Journal? I was summoned on September 15 to attend a healthy young woman, aged 20, in her first confinement. She did not *expect* for another month. The first and second stages were very lingering, but the membranes had ruptured, and there had, I was told, been a free discharge of liquor amnii

just before I arrived, which was at 2 p m. On making an examination, I found the os uteri well dilated, and the pains were strong and constant; but although in the intervals of the pains I made a most careful examination, I could not in my own mind decide on the nature of the presentation. Every attempt to introduce the hand brought on a most violent pain, so that the complete introduction of the hand would have been difficult, if not absolutely impossible, without exercising an injurious amount of force. So I thought it best to fall back on Sir Matthew Hale's maxium, "Festina lentè," and determined to wait. I did not have to wait long, for a few pains brought down, what at first gave the impression to the fingers of being the membranes, but which turned out to be the intestines of the fœtus, subsequently the liver came down. I then without any difficulty introduced my fingers and extracted the feet and legs, and afterwards brought down the hands. The head was a considerable time in passing, it being of the average size. The fœtus turned out to be a monstrosity, deficient in the anterior wall of the abdomen, the deficiency extending from a point about half-an-inch below the cruciform cartilage to the pubes, so that the viscera were completely exposed; viz., the liver whose left lobe was rather larger than the right. Stomach, spleen, large and small intestines, these last hung down lower than any other part of the body, as the knees were bent, and the heels were in contact with the nates, so that the intestines formed the presenting part. There were no external organs to indicate the sex, but rudiments existed of the bladder, and what appeared to be vagina and uterus, but none of these organs were, to say, closed in. There was no anus. There was a large spina bifida in the sacral region, the whole canal of the sacrum being patulous. The tumour was of the size of a middle-sized orange, and overlapped the nates. When the fœtus was laid prone, the lower part of the spine appeared to be tilted up, and was really curved in that direction, so that it had somewhat the aspect of a sinuous animal. The placenta was of usual size, but the cord was short, and the umbilical arteries and veins seemed to part company sooner than usual. There was no deformity or arrest of development, besides those I have mentioned; but dissection could not be performed, as the parents were desirous to bury the abortion, so it was not allowed to be removed. A somewhat similar case to the above is mentioned by Morgagne, but in that case there were other deformities as well as the abdominal.

I am, &c.

ROBERT BLAGDEN.

Stroud, Gloucestershire.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, September 19, 1861:—

Furber, George Henry, West Kent Infirmary, Maidstone
Harris, John Charles, Chipping Norton, Oxon
Roberts, Edward Stokes, Abbey-square, Chester
Stockwell, Frederick, United Hospital, Bath
Tyrrell, William James, Pembroke
Wookey, James, Weston-super-Mare

The following gentlemen also on the same day passed their First Examination:—

Lyell, Henry, Guy's Hospital
Turner, Richard, King's College.

APPOINTMENTS.

BARRETT.—Caleb Barrett, Fell. (exam.) and M.R.C.S. Eng, L.S.A. Lond., has been elected additional (third) Surgeon to the Gloucester Infirmary under the new Rule.

DEVILLE.—Dr. Deville has been appointed Lecturer on Practical Anatomy at the Manchester Royal School of Medicine.

EDWARDS.—George Nelson Edwards, M.D. Cantab., M.R.C.P. Lond. (by exam.), late Assistant-Physician to the City of London Hospital for Diseases of the Chest, has been appointed Physician.

FIDDES.—David Fiddes, M.D. King's Coll. Aberd., M.R.C.S. Eng., has been appointed one of the Surgeons to the Royal Infirmary, Aberdeen.

GREAVES.—George Greaves, M.R.C.S. Eng., L.S.A. Lond., has been appointed (jointly with Mr. Heath) Lecturer on Obstetric Medicine at the Manchester Royal School of Medicine and Surgery.

GREENHOW.—Edward Headlam Greenhow, M.D. King's Coll. Aberd., Fell. and M.R.C.P. Lond, has been appointed one of the Assistant-Physicians to the Middlesex Hospital. Dr. Greenhow has also succeeded the late Dr. Coote as Lecturer on Medical Jurisprudence and Public Health at the Middlesex Hospital.

HAKES.—James Hakes, M.R.C.S. Eng., L.S.A. Lond., late Assistant-Surgeon, has been appointed Surgeon to the Northern Hospital, Liverpool.

HUTCHINSON.—Jonathan Hutchinson, M.R.C.S. Eng., L.S.A. Lond., ha succeeded George Critchett, Fell. (exam.) and M.R.C.S. Eng., as one of the Lecturers on Surgery at the London Hospital.

LANCHESTER.—Henry T. Lanchester, M.R.C.S. Eng., has been appointed the Resident Medical Officer to the City of London Hospital for Diseases of the Chest, Victoria-park.

MANIFOLD.—William Hargreaves Manifold, M.R.C.S. Eng., has succeeded James Hakes, M.R.C.S. Eng., L.S.A. Lond. (on the latter being appointed one of the Surgeons) as Assistant-Surgeon to the Liverpool Northern Hospital.

MAYNE.—Robert Mayne, M.D. Trin. Coll. Dub., F.K.Q.C.P. Irel., has succeeded Alfred Hudson, M.D., Trin. Coll. Dub., F.K.Q.C.P. Irel., M.R.C.S. Eng., as one of the Physicians to the Adelaide Hospital, Dublin.

MURCHISON.—Charles Murchison, M.D. Edin., Fell. and M.R.C.P. Lond., L.R.C.S. Edin., has been appointed one of the Assistant-Physicians to the Middlesex Hospital.

WALLER.—Charles Beaumont Waller, M.R.C.S.E. and L.S.A. has been appointed Resident Medical Officer to the Royal National Hospital for Scrofula, Margate.

WALTON.—Thomas Walton, M.R.C.S. Eng., L.S.A. Lond., has been appointed Lecturer on Chemistry at the Hull and East Riding School of Medicine and Anatomy.

WARD.—Stephen Henry Ward, M.D. Lond., M.R.C.P. Lond., M.R.C.S. Eng., L.S.A. Lond., has been appointed Assistant-Physician to the City of London Hospital for Diseases of the Chest.

WHEELHOUSE.—Claudius Galen Wheelhouse, M.R.C.S. Eng., L.S.A. Lond., has been appointed President, for the year, of the Leeds School of Medicine.

DEATHS.

BENNETT.—Recently, Lacon Edward Bennett, of Birmingham.

BRAY.—Recently, John Bray, of Coventry.

BURN.—September 18, Wm. Sedley Burn, of Bishopwearmouth, Durham, M.D. Univ. Edin., one of the Magistrates of the Borough of Sunderland, aged 71.

ELLIS.—July 21, of consumption, at Brass River, West Coast of Africa, where he had been in practice for many years, Evan Lloyd Ellis, aged 43.

MACARTHUR.—July 5, at Arthurton, Victoria, Dr. Peter Macarthur, J.P., late of the 6th Royal Veteran Battalion, aged 87.

WALKER.—September 16, Thomas Dixon Walker, of Hurworth-upon Tees, Durham, L.S.A. Lond.

FRIENDLY CRITICISM.—One of the very simplest reasons why writers are protected, is that the critics and the writers are connected by the ties of private friendship. A silly puff of a friend's book cannot be called criticism at all; but a critic who really criticises a friend's book cannot remain uninfluenced by his friendship. He will not, if he is honest, abandon his primary duty of giving the public a faithful account of the work, but he will dwell on the good points and pass lightly over the bad. Where he cannot praise at all, he will keep silent altogether. No man of any sense will quarrel with his friend because he differs with him on a point of purely historical and scientific interest, but he will expect that his friend shall merely point out his error, and shall not abuse him. He will allow his friend to show that his view of the character of Cleon or Marlborough is wrong, but he will not expect that anything like ridicule or contempt should enter into the demonstration. This seems to us quite right. It is allowable, unless very vital principles are at stake, to keep silence when a friend makes himself a fool in print. It is allowable to notice his book, and point out where it is wrong, and why; but it is not allowable to tell him in print that he has made himself a fool. The charities of life, the duties of good fellowship, and the claims of a long-established and mutual confidence enjoin the observance of this sort of reticence. As a matter of fact, it is, we believe, generally observed, and perhaps friends are apt to praise too warmly rather than blame too much. Even, however, where there is an excess of friendly praise, we need not look very severely on it, provided it is the expression of genuine feeling.—*Saturday Review.*

VICTORIAN SNAKES.—At the meeting of the Royal Society on June 17, Professor McCoy read an interesting paper on Victorian snakes. He said that the reptilia had been hitherto much neglected by observers. Only three species had hitherto been alluded to as found within the boundaries of Victoria; but he would draw attention to eleven species, specimens of which were exhibited on the table. Having seen statements from time to time in the newspapers, to the effect that not one-tenth of the snakes in the colony were poisonous, he considered some few observations on the structure of the Victorian species would be interesting, more particularly as, with one exception, all were poisonous. He

then explained the character of the following genera and species from Victorian specimens:—1. The Morelia variegata, or the common carpet snake. 2. Acanthropus Antarctica, or death adder, found in New South Wales and in this colony. 3. The Diemansia reticulata, found in West Australia. 4. The Hoptocephalus caronoides. 5. The Hoptocephalus flagellum, or common whip snake (McCoy), a new species. 6. The Hoptocephalus Gouldi. 7. The Hoptocephalus curtus, or tiger snake. 8. The Hoptocephalus superbus; the common name of that species he had been unable to ascertain. 9. The Palldiceps, a specimen of which was only obtained a few weeks ago. 10. The Pseudodectus porphyraicus, or true black snake. 11. The Pseudonaja nuchalis, or brown snake, which resembled very closely the Cobra Capella. The Morelia variegata, or carpet snake, figured some years ago in the Proceedings of the Royal Society as a new species of boa, and that announcement caused many inquiries to be made by naturalists of him as to the truth of the assertion that a true boa existed in Australia; for, if it were true, it would upset the geographical distribution of the groups of serpents. There was no ground, however, for the assertion, as he found upon close examination that none of the characters which distinguished the American boas from the Indian pythons, existed in the Victorian species. The second species, known as the death adder, was the most deadly snake of the country, and was the only example of Cuvier's great group of *serpents vénéneux par excellence ou à crochet isolés*, or the order Viperini to which the rattle-snakes fer-de-lance, puff adder, and others belonged.

The Rapidity of Growth in Fungi.—Mr. Ward, in his work "On the Growth of Plants in Closely-Glazed Cases," says of it:—"I had been struck with the published accounts of the extraordinary growth of the *phallus impudicus*. I therefore procured three or four specimens in an undeveloped state, and placed them in a small glazed case. All but one grew during my temporary absence from home. I was determined not to lose sight of the last specimen; and observing one evening that there was a small rent in the volva, indicating the approaching development of the plant, I watched it all night, and at 8 o'clock in the morning the summit of the pileus began to push through the jelly-like matter with which it was surrounded. In the course of twenty-five minutes it shot up three inches, and attained its full elevation of four inches in one hour and a-half. Marvellous are the accounts of the rapid growth of cells in the fungi; but in the above instance it cannot for a moment be imagined that there was any increase in the number of cells, but merely an elongation of the erectile tissue of the plant." The force developed by this rapid growth and increase of the cells of fungi is truly astonishing. M. Bulliard relates that on placing a fungus within a glass vessel the plant expanded so rapidly that it shivered the glass to pieces with an explosive detonation as loud as that of a pistol; while Dr. Carpenter, in his "Elements of Physiology," mentions that "in the neighbourhood of Basingstoke a paving-stone, measuring 21 inches square, and weighing 83lbs., was completely raised an inch and a-half out of its bed by a mass of toadstools of from six to seven inches in diameter, nearly the whole pavement of the town being heaved up by the same cause." Everyone has heard of the portentous growth of the fungi in a gentleman's cellar, produced by the decomposing contents of a wine cask, which, being too sweet for immediate use, was allowed to stand unmolested for several years. The door in this case was blocked up and barricaded by the monstrous growth, and when forcible entrance was obtained the whole cellar was found completely filled, the cask which had caused the vegetable revel, drained of its contents, being triumphantly elevated to the roof, as it were upon the shoulders of the bacchanalian fungi.—*Macmillan's Footnotes from the Page of Nature.*

A Hint.—Writers are often protected by a feeling of nobleness and generosity in those whom they have offended. There are very excellent people who delight in a quarrel; and there are people, not much better, perhaps, on the whole, who do not like a quarrel. Some writers espouse every cause they take up so heartily and warmly, that they regard all dissent from their opinions as a personal affront. They draw no distinction between the past and the present—between the dead and the living—between the region of philosophy and the region of daily life. They are as angry if another writer will not agree with them about Mary Queen of Scots or Cleopatra as if he had defamed their sister or wife, and hate a man who attacks their view of the Unconditioned as if he had cheated them at cards. Very often this leads to a wordy war; but very often it does not. The opponent may be a peppery, narrow-minded man, and then he goes in as hard as he can on the other side; but very often he is a generous and noble man, who hates these personalities of literature, and will not stoop to injure a man who has injured him. Good taste may perhaps easily lead him to avoid a direct personal controversy on a particular point. But he will be tempted to take his revenge in a much subtler way. His adversary, who has criticised him with bitterness, may in his turn publish a work, and this work may be perhaps good in its way, but still very open to criticism, full of platitudes, of assumptions, and errors. The injured man may have it in his power to criticise the book in a publication where criticism makes itself felt. We do not say that it his duty to abstain, but in real life he very often does abstain from saying what he thinks, and from criticising freely, merely because he thinks it ignoble to engage in a contest with a man who loves to import personal bitterness and personal ill-feeling into literary discussion.—*Saturday Review.*

VITAL STATISTICS OF LONDON.

Week ending Saturday, September 21, 1861.

BIRTHS.

Births of Boys, 944; Girls, 886; Total, 1830.
Average of 10 corresponding weeks, 1851-60, 1636 6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	564	562	1126
Average of the ten years 1851-60	588 9	578·4	1167 3
Average corrected to increased population..	..	..	1284
Deaths of people above 90	2	..	2
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	2	5	..	4	2	13
North ..	618,201	..	1	8	4	4	7	22
Central ..	378,058	..	..	8	3	6	4	12
East	571,129	2	..	9	4	19	10	21
South ..	773,160	2	1	15	10	14	8	37
Total.. ..	2,803,921	4	7	45	21	47	31	105

Medical Times and Gazette.

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Mean height of barometer	29·820 in.
Mean temperature	54·4
Highest point of thermometer	71·8
Lowest point of thermometer	39·4
Mean dew-point temperature	48·2
General direction of wind	S.W.
Whole amount of rain in the week	0·25 in.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Several letters respecting the letter published on September 7, p. 252, on "Mankind before the Deluge," have been received, and have been forwarded to our Correspondent. An excellent article on this subject may be found in the *Natural History Review* for last April, by Mr. Busk.

Fibrinous Deposition in the Aorta or Pulmonary Artery.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I should feel obliged if any of your readers would have the kindness to give me references to cases of sudden death from fibrinous deposition in the aorta or pulmonary artery, during an attack of acute rheumatism.

I am, &c.

September 18. Medicus.

Dr. Bright.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following was inserted in the *Carmarthen Journal* a week or two ago:—"Just published, price 1s.; by post, 1s. 2d.; sealed, 1s. 10d., Dr. Bright's Manual on Spermatorrhœa and other Urinary Deposits, with Cases and Drawings from Life, etc, etc., Licentiate of the College of Physicians, Member of the Royal College of Surgeons, etc., etc. Contents:—Modern Treatment of Syphilis—Stricture—Impotency—Unhealthy and Debilitated Offspring—Diseases of the Urinary Organs—Non-retention of Urine—Desire for Solitude—Groundless Fears—Incapacity for Married Life, etc.; showing how these supposed incurable maladies may be effectually eradicated by the most simple means. Published and sold by, etc., etc."

Has this Dr. Bright the qualifications stated? If so, he ought to be ashamed of himself, and so ought the Colleges. I am, &c.

Pembroke, September 17. D. A. K.

Lead Poisoning by Snuff.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If your Correspondent J. J. C. will make application to our worthy *confrère*, J. C. Burrows, Esq., of Brighton, he can give him the history of a case of lead poisoning by that idle and very pernicious practice, "taking snuff," which it would be well for England, Scotland, and Ireland if its use, together with that of tobacco in every shape, could be put down. I am, &c.

1A, Linton-terrace, Hastings, September 16. J. Steavenson, M.R.C.P.

Mesmerism in the British Medical Association.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Now that the Fergusson and Roberton affairs are settled, it would be well to have a look at the Mesmerisers and their friends. A late President of the British Medical Association, and I believe a Vice-President, is amongst the warmest supporters of Mesmeric quackery, and has given the strongest proof of his devotion by subscribing handsomely to the Mesmeric Infirmary. His name and subscription will be found in the published reports of that institution, and his case is hereby commended to the zeal of the public prosecutors of the British Medical Association.

I am, &c. A Member.

Chloroform in Slaughter-houses.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Would you kindly give publicity to the following. My object is to attract the attention of those abler (though not more willing) to deal with the subject than myself:—

"Euthanasia of a Pig under Chloroform.—One day last week (says the *Kendal Examiner*) a patient in the Kendal Workhouse had undergone a painful surgical process, for the performance of which the administration of chloroform was judged needful by the operator. It happened to be pig-killing day, of which the indication was loudly apparent, when it occurred to the worthy Practitioner to suggest the same opiate to the doomed grunter. The hint was acted upon, the sponge applied to the animal's nostrils, and in a moment he was as quiet as a lamb. In this unsuspecting condition the poor victim had the knife applied to its throat, and with a result every way satisfactory and complete."

If the result of this application of chloroform should have been in every way "satisfactory and complete," by which I conclude to mean that the meat was wholesome and in every way fitted for human food, why not apply chloroform to all animals consigned for slaughter, especially to those whose death is of a cruel and lingering nature, or to those animals undergoing painful operations, as that of castration? By a want of thought, or indifference, a sheep is made to feel double the pain which, by a little precaution, would be spared it. A blow on the head, previous to the knife being applied, would destroy consciousness, and rob death of half its pain and terror. I have the authority of a master butcher in a large way of business for saying that "Oxen suffer very little pain, while sheep suffer a great deal." My motto has been, "Do to others as you would be done by," and by this I do not include my fellow creatures only, as many foolish people do, but everything that has life under the sun, created by the same Hand that made ourselves, and who cannot disdain to care for them; and seeing that it is a necessity for them to suffer death at the hand of man, (at least many people think so, although it is one of the rather long list of popular delusions,) I would wish to see as painless a death as could be desired for those who contribute so much to the well-being, happiness, and prosperity of man. In conclusion, what is the reason that the subject of animals is so little adverted to even by those of professed benevolence, why is it that the meek and gentle have so few champions?—because neither profit nor honour is to be gained. Oh, the selfishness of human nature, it destroys others and in so doing destroys itself. I am, &c.

Edinburgh, September 17. Pythagoras, jun.

Contagion by Post.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The case detailed in the *Medical Times and Gazette* of to-day, entitled "Scarlatina Infection," reminds me of one of a similar nature, which occurred in my practice about a year ago, the disease being in this case, rubeola.

A young lady, who had some years ago experienced an attack of measles, whilst visiting in this neighbourhood received a letter from a friend, who was then in constant attendance upon another friend ill of measles. Within a few days of the receipt of this letter, I was sent for, to give my opinion as to the nature of a rash which had appeared upon my patient, and which was thought by her to be measles.

On careful examination I had no hesitation in confirming this opinion, and, as the eruption continued visible for several days, I had frequent opportunities of verifying my diagnosis. As is not uncommonly the case in a second attack, the constitutional symptoms were very slight, yet they existed in a sufficiently marked manner.

I must now reiterate Dr. Carson's question, "Was the infection conveyed in the letter?" And although I cannot say "The young lady was not out of Milton Abbas for months," (inasmuch as she was a visitor,) she had been staying here some little time previously, and there was no case of measles in the neighbourhood, neither was she aware of having exposed herself to any source of contagion.

The case made a strong impression on my mind at the time, but, as proof direct, that contagion could not have been conveyed in the ordinary way was wanting, I hesitated to publish it. Now that Dr. Carson's case has in some measure tended to supply this deficiency, I do not think myself justified in longer suppressing it, and hope that other facts may be adduced tending to elucidate the somewhat difficult question. My own impression is, that in both these cases the infection was conveyed in the letters. If pus-cells can be detected in the air (*vide* Dr. Eiselt's report, page 277, *Medical Times and Gazette* of this date), there is in my humble judgment nothing improbable in the supposition that the contagion of scarlatina, measles, etc., may be communicated by transference to paper sent through the post. I am, &c.

John Ewens, L.R.C.P. Lond.

Milton Abbas, September 14.

APPOINTMENTS FOR THE WEEK.

September 28. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

30. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

October 1. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

2. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Obstetrical Society of London, 8 p.m. Dr. Little "On the Influence of Abnormal Labour in the Mental and Physical Condition of the Child, especially in Relation to Deformities."

3. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

4. *Friday.*

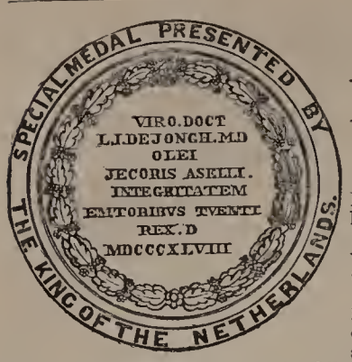
Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

Westminster Hospital.—The following Operations will be performed on Tuesday next:—

By Mr. Holt—For Stricture of Urethra; for Necrosis of Tarsus; Excision of the Head of Femur; Ununited Fracture of Humerus.

By Mr. Hilman—For Fistula in Ano; for Removal of Cystic Tumour.



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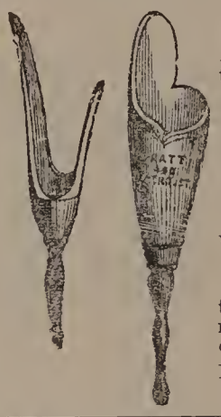

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OPENING OF THE LONDON MEDICAL SCHOOLS.

THE LONDON HOSPITAL.

Dr. Ramsbotham delivered the Introductory Address. He began by saying that Hesiod, nearly three thousand years ago, wrote "Ἀρχὴ ἥμισυ παντός," (when a man has begun a thing, he has half finished it); that Horace subsequently expressed the same sentiment, "Dimidium facti, qui cœpit, habet;" and that he himself felt the force of the proverb, in his present address; for the annual recurrence of such demonstrations rendered the selection of a subject, and the commencement of the undertaking the chief difficulty. It was not his intention to carry his auditors along the well-beaten road which leads to the conclusion that Medicine is a divine art, and that each practising Physician deserves the compliment paid by Homer to Machaon, when he called him ἰσόθεός φῶς, or that Cicero was fully warranted in writing, "Homines ad deos nullâ re propius accedunt, quam salutem hominibus dando." Nor did he intend to work out any physiological problem, or endeavour to prove the correctness of Paley's remark, that in the earliest stages of development there is no difference discernible between a frog and a philosopher; but he wished it to be a plain, practical address, conveying such advice to those entering on their Medical studies, as might help them over a stile or two in life, and remove some impediments encumbering their path, which would conduct them, possibly to distinction, at all events to usefulness. He proceeded to argue that such assemblages as meet on these occasions, are not without their value; that the presence of the teachers might be taken as an earnest of their desire efficiently to fulfil the duties they have undertaken to perform; and that while they devoted themselves to their pupils' interests, they expected in return a diligent and steady co-operation from their class, during the whole period assigned to the prosecution of their new studies. After some useful advice as to the assistance they might derive from books, and the mode in which they should employ them as accessories, indeed, to their own mental resources, he spoke of the advantages to be obtained from lectures, and stated that there were two prominent defects in lectures, though both could be obviated by the student himself; the first, that if one out of a course is missed, the whole chain is broken, and the link very difficult to supply; the other, the chance that what is so easily and lightly won, may be as easily and lightly lost; for the memory is retentive in proportion to the labour undergone in storing the subject in the mind; and it is clear that the mere attention to a lecture entails but little mental labour. He recommended them that what is heard in the class-room should be compared with the writings of other authorities, as the best method of engrafting it on the memory. But the exercises of the class-room must be considered only preparatory to the careful observance of disease by the bedside, without which the most profound theoretical Physician would be deficient in the very essence of his Profession. He then noticed the revolution that has come over the Profession owing to the operation of the new Medical Act; and the determination of the College of Physicians to grant a qualification to the General Practitioner. "This proceeding seems to me," he added, "a natural consequence of the altered relation in which the Colleges stand in reference to the Profession at large. They have been summarily deprived of their monopoly; and no man need now enrol himself a member of their corporation. In this dilemma, shorn of the puny power which they heretofore enjoyed, and bereft of so large a portion of their privileges, it occurred to them, as a matter of course, since they could no longer compel the allegiance of University graduates, to invite other volunteers to join their standard, under fresh auspices and new enactments. Few will deny that this is a judicious move; its propriety, nay, its necessity, is evidenced by the high position in society which the General Practitioner now occupies. He is, indeed, the family Physician to the large mass of the community, and as he performs that office in private, he has a right to claim that he should be acknowledged as such in public. The day of the Apothecary has passed away. Indeed, the very term, as signified by its derivation, is offensive when applied to the highly-educated Practitioner of the present time; and to call the accomplished gentleman to whose Medical charge is entrusted so large a proportion of the English public, by the same title as designated the Apothecary of the sixteenth and seventeenth centuries, is a libel on his character, and an insult to the understanding of the age. It is left for each of you now to determine whether you will hold a place on the roll of the Royal College of Physicians, or whether you will become a Licentiate of the Worshipful Society of Apothecaries. I beg, however, that you will not leave this theatre under the impression that I think lightly of the exertions which the Apothecaries' Society have made towards raising their alumni in the social scale, and, by insisting on a high standard of education, enhancing the acquirements of the Medical body in general. Much credit is due to them for their successful efforts; they were active while the Physicians were supine; they were the first to advance in the race which has been productive of so much emulation; and to their example may be chiefly attributed the advantages which have accrued from the wide diffusion of Professional knowledge in this country. But the time has come when the Apothecaries' Society should relinquish their charge; for they must see that the introduction within the portals of a liberal and scientific Profession should be no longer left to the guidance of a trading Company, however respectable, both in station and in intellect, the different members composing their Board might be. The duty, indeed, was in some measure forced upon them by the exclusive feeling which actuated the governing clique among the Physicians of that epoch. The College of Physicians, carefully shrouded in the cloak of their own dignity, refused to admit within their hall, except on rare occasions, and as marks of condescending favour, any one who did not possess a University diploma. The task consequently devolved on the Apothecaries' Society, as the only other corporate body cognisant of Medical affairs. Fortunately, the present generation of Physicians have been and are desirous of rectifying the errors which their predecessors committed; and the concerns of this once close Corporation are now conducted in a spirit of catholicism which would make the shades of some of our forefathers, could they take a review of our proceedings, stand aghast with incredulous dismay." Dr. Ramsbotham strongly advised his pupils, notwithstanding the amount of knowledge required from them by their Medical examiners, to dedicate some time occasionally in keeping up their classical acquirements, as well as any of the modern languages they may have become acquainted with during their school-days, the gratification as well as advantage from which they would in after-life be very ready to acknowledge. And he also recommended them to cultivate the art of public speaking, a graceful accomplishment, for the most part altogether ignored in the seminaries for our youth. He said:—"It has always appeared to me that Medical men are peculiarly deficient in this winning art,—at least they are so when contrasted with the clergyman or the barrister. The reason is obvious; they do not accustom themselves to its exercise. They work, indeed, more with the pen than with the tongue. Why is that many men who can write an excellent letter, and throw off a very tolerable essay, make so sad a display if called on to deliver, I will not say an extemporaneous oration, but even a short speech of ordinary courtesy in public? It is because they are placed in an unusual position; and, although words flow readily enough to the nibs of their pens when writing, the same words will not rise to the tips of their tongues when speaking." He stated his conviction that the general opinion that eloquence is entirely a natural gift, was a great mistake, and instanced Demosthenes, who transcribed Thucydides' history eight different times for the purpose of perfecting himself in oratory; Brougham, who said he wrote the peroration to his speech in defence of Queen Caroline sixteen times before he could finish it to his mind; and Sheridan, who, when he had any particular speech to deliver in Parliament, used to lie in bed all the morning to compose it. This showed the discipline necessary to make an accomplished orator. He recommended that the rising generation of Medical Practitioners should, during their periods of leisure, drill their minds to the choice of words suitable for particular occasions, and should habituate themselves to fashioning sentences and sounding periods; and he remarked that if Demosthenes, Brougham, and Sheridan condescended to rehearse their speeches, no man need feel it beneath him to imitate such illustrious examples.

In his pilgrimage through life the Medical Practitioner must be prepared to encounter jealousies and envy: for so delicate a profession as that of Physic is peculiarly obnoxious to their blows. He may, indeed, have to withstand the stinging malevolence of disappointed rivalry, the open attacks of malice, or the secret whisperings of calumny; the best safeguard against which is a life of rectitude and probity, an unspotted character, and an honourable line of conduct. He may, perhaps, also have to bear the disappointment of seeing himself outstripped in the course over which he is toiling by one whom he knows to be altogether his inferior; for the public are but bad arbiters of Medical skill. At the bar, and in the pulpit, shining talents must be appreciated, because they are prominently brought forward; and the engineer and the architect find plenty of opportunities to display their powers before an admiring multitude. It is not so in Medicine: none but a Medical man can judge of the attainments of a brother Practitioner, and consequently the estimation of the world is often disastrously at variance with the candidate's deserts. He will have also the annoyance of contending against the encouragement given to quackery. From the earliest ages this has been a thorn in the side of legitimate Medicine, and probably will continue so as long as human nature is afflicted with corporeal maladies. Dr. Ramsbotham concluded a very eloquent and classical, as well as practically useful address, by saying:—One species of this kind of folly runs riot even in high places, and among the *élite* of the land, countenanced, I am sorry to be obliged to confess, by some disloyal deserters from our own ranks. I feel assured I need not caution you against being led away by such mischievous absurdity. The gain of gold will not counterbalance the loss of professional respectability, nor even of self-esteem. Sedulously avoiding, then, the puerilities of Homœopathy, the juggle of Animal Magnetism, or the blasphemies of Spiritual Manifestations, early accustom yourselves to search for Truth. She is coy and retiring; and to be fairly won must be ardently wooed; but, though shrinking from the gaze of the world, she rarely flies from her sincere and devoted worshippers. In this way you will arrive at what should be the summit of your desires, the haven of your hopes.—you will command the regard of your fellow-men; you will live useful and honoured; you will in time accumulate those temporal goods which seldom fail to requite the industrious labourer in every walk of life; and you will ensure that reward which is greater than wealth or titles, "The blessings of thousands on your successful skill."

MIDDLESEX HOSPITAL.

Dr. Murchison, after paying a feeling tribute to the memory of the late Dr. C. T. Coote, by whom the Introductory Lecture of last Session was to have been delivered, said: It is not my intention to discuss the social, the moral, and the religious duties of the Medical Student, which differ but little from those of his fellow-men; but I shall endeavour to make a few remarks, specially adapted, on the one hand, to those of you who are commencing, or still prosecuting your studies; and, on the other, to those who are about to turn the instruction which you have received, to practical account. And first I would address those among you who are commencing, or who have but recently commenced, the study of Medicine. You must never forget that you come here to *acquire knowledge*. The attainment of knowledge is the most ennobling of all occupations; it is the possession of knowledge that constitutes the real distinction of one man above his fellow, and that elevates the human race above the beasts which perish; while the prosecution of knowledge, in a right direction, is the best use that we can make of the talents which have been entrusted to us, for by this we may hope to glorify our Creator, and ameliorate the condition of our fellow-men. Now, there may be said to be three faculties, which are concerned in the attainment and the increase of knowledge, *the acquisitive*, *the productive*, and *the communicative*. The communicative faculty I need not dwell upon, as it concerns myself and my colleagues more than you; but this I may say that, whether in the lecture-room, the dissecting-room, the wards of the Hospital, or the post-mortem theatre, we have your instruction and advantage at heart, and we trust you will never fail to apply to us in every difficulty which you may encounter in the prosecution of your studies. There is one way, however, in which you may call the communicative faculty into operation, and that is by communicating your knowledge one to another, and by questioning one another in the various subjects which you are studying together. Such a practice will give you the truest information as to the progress you are making, and will form the best preparation for examinations hereafter. The productive faculty is that by which a man avails himself of the knowledge he has already acquired in order to extend its boundaries by drawing from it fresh inductions and discovering new facts. It is the acquisitive faculty, however, which they who are commencing their studies must specially call into play. Dr. Murchison, after enumerating the various branches of learning in which the Medical student should be grounded before commencing the study of Medicine, referred to the great value of the recent recommendations of the Medical Council in respect of preliminary education, and said: In order to command the respect of society and maintain the dignity of his Profession, the Medical man must know something more than the mere practical duties of his calling. He ought to be at least the equal in point of general education of his associates in society. . . . Although some inconvenience will probably arise at first in carrying out the recommendations of the Medical Council, it cannot be disputed that the high standard of general education which characterises the present age loudly called for some interference if Medical men are to continue to lead the van, as they have hitherto done, in the maintenance and advancement of knowledge. There is one great benefit which must result from the new regulations recommended by the Medical Council, and that is the abolition of the system of apprenticeships—one of those links which have served to connect the Profession of Medicine with a trade. Nothing has contributed more than this system to lower the standard of education, both general and professional, among Medical men in this country. And the reason is obvious. The young man wastes those very years of his life in serving as an apprentice which ought to be devoted, and which in future must be devoted, to the acquirement of the general knowledge necessary for entering upon the study of Medicine, while the smattering of practical information which an apprenticeship affords but too often unfits its possessor for commencing his Professional studies in a scientific spirit. The money hitherto given as the apprenticeship fee will in future be far better spent in acquiring a liberal general education. Dr. Murchison then continued as follows:—I shall now proceed to point out to you the nature of the knowledge which you have come here to learn. The science of Medicine, regarded in a comprehensive way, is nothing more than an applied branch of the natural history of man in connexion with other departments of natural science. An eminent French comparative anatomist has well observed, that in order to comprehend the nature of any organised being, it must be viewed in two aspects, first in its static condition, or in reference to its structure and composition in a state of rest, and secondly in its dynamic state, as regards the phenomena of the structure in motion. Now, this double mode of viewing an organised being embraces the whole of the principles of the study of Medicine. The Lecturer then specifically described the relation of each branch of Medical study in its statical and dynamical aspect, and concluded with a few words of advice to the Students, from which we extract the following:—Addressing those about to enter practice, Dr. Murchison said:—You must not cease to study because your student days are over. Human knowledge is never stationary or complete: its essence is progress. What was the goal to-day is the starting-point to-morrow. To no department of knowledge is this truth more applicable than to Medical Science. It will be your bounden duty to call into play the productive faculty of your intellects. You must not be satisfied with the knowledge you have acquired, but you must avail yourselves of every opportunity to increase it, and to add to the common stock. There never was a period in which so many questions of grave importance agitated the minds of the Profession, and called for earnest labourers in the field of investigation as the present. To commence with the treatment of disease, you will find that opinions are still divided upon the great blood-letting and alcohol controversies. There are many who believe that the living race of Practitioners err as greatly in bleeding too little, as our forefathers did in

bleeding too much. Nothing is definitely settled as to the mode of administration, and the mode of action of alcohol in disease. Recent researches discredit the hypothesis that alcohol is to be regarded as food in disease, and show that in the inordinate quantities in which it has lately been the custom to administer it, its tendency is to disturb all the vital functions, and counteract the *vis medicatrix Naturæ*. A fundamental blow has thus been struck at the fashionable revival of Brunonism, which is believed to be responsible for the origin of habits of intemperance among some of the patients who survive, and for dismissing not a few drunken and unconscious to another world. But, indeed, the entire subject of therapeutics is yet in its infancy. In the whole range of Medical Science there is nothing so urgently demanded as carefully-conducted observations on the mode of action of remedies. Amidst the multiplicity of Medical Societies, it is remarkable that we have no Therapeutical Society. The apathy of the Profession on this subject is truly a disgrace to the age in which we live. If you turn from the treatment to the prevention of disease, you will see that notwithstanding the rapid strides with which preventive Medicine has advanced during the last few years, it still offers a wide field for the labours of philanthropists, and promises results fraught with benefits to the human race as great as those which have immortalised the names of Howard, Cook, and Jenner. After dwelling upon the great field for research opened out by Statistical Medicine, the necessity for studying the natural history of disease, and the questions of present interest in Pathology and Surgery, Dr. Murchison observed:—It is for you to investigate and elucidate these and many other questions in Medicine and the collateral sciences. Launched into the sea of life, you must cease "*jurare in verba magistri*," but you learn to observe for yourselves, and to observe correctly, never forgetting the maxim of Rousseau, "The truth is in the facts, and not in the mind that observes them." To each of you a talent has been committed for which you must render an account. All of you will have it in your power to leave your "footprints on the sands of time," and to contribute something to the rearing of that glorious edifice of Medicine which was founded upwards of 2000 years ago, and has been bequeathed as a precious legacy by our forefathers, and which it is our duty to hand down to posterity amplified and adorned.

"In the world's broad field of battle,
In the bivouac of life,
Be not like dumb, driven cattle;
Be a hero in the strife!

"Lives of great men all remind us
We can make our lives sublime,
And, departing, leave behind us
Footprints on the sands of time,—

"Footprints, that perhaps another,
Sailing o'er life's solemn main,
A forlorn and shipwrecked brother,
Seeing, may take heart again.

"Let us, then, be up and doing,
With a heart for any fate,
Still achieving, still pursuing,
Learn to labour and to wait."

. . . . "The substitution of the new licence of the College of Physicians for that of the Apothecaries' Hall, together with the determination of the Medical Council in respect of preliminary education, will unquestionably effect a mighty revolution in the Medical Profession, and by elevating the thoughts and aspirations of each individual member, will exalt the status of the entire body. Never sacrifice your truth and honour to personal advantage and professional advancement. You must be more careful to deserve distinction than to seek it; and, above all, you must beware of seeking it at the expense of your neighbour, and by means which the still small voice of conscience will tell you to be not strictly honourable. No legislation, nor any system of Medical registration can put down quackery or exclude irregular practices from our ranks; these objects can only be attained by individual Medical reform. Every one of you must be scrupulously circumspect to do nothing which might be construed into a support of such practices on your part. You must not only abjure quackery and unprofessional conduct in every form yourselves, but you must lend no countenance to them in others. You must show the public, by your conduct, how great is the difference between you and the pretentious charlatan, and you must never consent to meet such a person on terms of professional equality. . . . . Ever bear in mind that your calling is a sacred one. It will be your blessed privilege to imitate the example of the Great Physician, and to go about the world continually doing good. Not a day will pass but you will have it in your power to alleviate suffering, to heal the sick, and to minister comfort and consolation to the dying. But be careful not to incur the charge of abusing these great privileges. Let not familiarity with disease and death and the frail emblems of mortality render you callous to the effects which they naturally produce on the mind. When you are called upon to witness the flickering and extinction of the flame of life, remember that ere long you yourselves will be the principal actors in such a scene, and that then you will have to account for the talents entrusted to you on earth. Think what that account must be if you make the sacred privileges of your calling and the sufferings of humanity subservient to the attainment of wealth and worldly distinction. Above all, seek ye first the Kingdom of God and His righteousness, and be assured that all these things shall be added unto you."

GUY'S HOSPITAL.

Dr. Odling began by adverting to the want of confidence felt by a large portion of the public in the scientific principles upon which the art of Medicine was based. His object was to convince his hearers at the outset of their career of the certainties of Medical science, and to encourage them to pursue the study of Medicine in a spirit of philosophic inquiry. For this purpose he wished them to consider the relation in which Medical knowledge stood to natural science in general. He argued that the object of Medical knowledge, like that of all natural science, was the development of general laws, and that the attainment of Medical knowledge, like that of all natural science, was effected by an observation and interpretation of nature. He objected to the common definition of natural science as the knowledge of causes and their effects, and maintained that it was really the knowledge of phenomena and their associations. The former definition would almost exclude chemistry and biology from the domain of natural science; but the wider definition would lead them to perceive that the general truths of physics, chemistry, and biology were strictly analogous to one another. He then proceeded to show that there was no greater knowledge of the causes of these physical phenomena, simple or complex, in describing which the language of causation was usually employed, than there was of the causes of vital phenomena. Scientific investigation, whether physical, chemical, or biological, was essentially a search after ultimate causes; not, indeed, after secondary causes, except in a very limited way. He thought the definition of natural science as a knowledge of causes and their effects objectionable, as tending to create in men's minds an unfolded separation of associated branches of knowledge. He next referred to what were usually spoken of as the laws of nature. These laws, he considered, existed less in nature than in the human mind. They were not God's full expressions, but man's imperfect conclusions. All observational laws, of the lowest degree of generality, whether physical, chemical, or vital, were or had been inexact. As they became more abstract they became more perfect, but it was only when laws of the highest degree of generality were arrived at that all variation and exception disappeared. There was no law in Medicine comparable to the law of gravitation; but then there was no law comparable to it for accuracy, simplicity, and universality, throughout the whole range of human knowledge. But it must be remembered that the law of gravitation referred only to motion, the most simple and obvious of all the affections of matter. The laws of Medicine, however, were strictly comparable with many recognised scientific laws, and particularly with those of the natural history sciences. For the study of Medicine as a part of natural history science there was required an education of the senses to secure correct observation, an education of the judgment to secure sound generalisation, and an education of the moral character to secure honest verification. The power of accurate observation was not by any means an intuitive faculty, or even a common attainment. Unfortunately, the education of the senses was all but totally neglected in most institutions for general education. As every branch of study tended to the special development of some one set of faculties, so it was found that Medical study,

more, perhaps, than any other, tended to the development of the powers of observation. In the wards, the museum, and the dead-house, they would meet with no scanty supply of material on which to base their observations. He would not underrate the value of the oral teachings they would receive; but he thought it impossible to overrate the value of the opportunities afforded them for correlating those teachings with the result of their own observation. Their investigation of disease would soon satisfy them of the calls which were made upon the judgment of a Medical man. He had to exert his scientific judgment so as to interpret rightly the phenomena of the disease presented to him, to foresee the course it would take, and the conditions to which it would give origin; and, guided by his knowledge of the natural history of the disease, of what it was and what it would be, had to exert his artistic judgment as to how he should act. But there was a still higher function for the judgment of the philosophic Physician, namely, the interpretation, not of some particular case of disease, but of disease in general, so as to effect an advancement of Medical knowledge. It was the honourable distinction and privilege of a student of Medicine to be engaged through life in the pursuit and exploration of truth, and in the acquisition and extension of knowledge. In their Professional career they would all acquire experience, but they must also educate their judgment and invention, in order to interpret their experience. They must not be deterred from pursuing their investigation by the appearance of irregularity and inconsequence which many Medical phenomena presented. The study of various branches of advanced scientific knowledge had established a conclusion that in every natural phenomenon the complexity was apparent, the simplicity actual; that in every seeming irregularity there was a real regularity waiting to be discovered. They might doubt the accuracy of any recognised interpretation of disease, provided they were thereby stimulated to achieve a better interpretation; but they must not doubt that susceptibility to interpretation by which all natural phenomena were characterised. In forming their own interpretations of Medical phenomena, their object must be the truth, and not vain-glory. They should, therefore, rather invite than decry criticism, no matter how searching. The criterion which perhaps more than any other distinguished a philosopher from a charlatan was the desire of the one and the fear of the other to submit his views to the rigid scrutiny of an opponent. All men loved truth in the abstract, but few loved that particular truth which was subversive of their own opinions. It required an education and mental discipline to overcome the propensity which existed in all men to disregard the results which oppose, and to exalt the results which support, their own theories. In conclusion, he warned his hearers against that barren scepticism which resulted in indifference, and advocated that fertile scepticism which resulted in exertion. He assured them that the science of Medicine was a reality based on the interpretation of Nature; that its phenomena were amenable to general laws, and that its problems invited their investigation. He maintained that the study and practice of Medicine constituted one of the most dignified and worthy pursuits to which they could devote themselves—that they were to be throughout their lives students of God's works, and benefactors of His noblest creatures. (Loud cheers.)

CHARING-CROSS HOSPITAL.

Mr. Canton passed in review before the students those various branches of knowledge with which they would have to become acquainted ere they would be justified in undertaking the responsible office of a Medical Practitioner. He reminded them at the outset of their studies that they must become thoroughly acquainted with the human body in a state of health before they could hope adequately to comprehend its condition in a state of disease, or to readjust the balance when it was disturbed. To the sciences of anatomy and physiology they would have to pay particular attention. The object of the former in its most extended sense, was to ascertain and make known the structure of organised bodies. Physiology was the science which treated of the conditions, phenomena, and laws of life. By the study of those subjects they would arrange the foundation-work whereon was to be reared the superstructure of the art and science of Medicine. Too great stress could not be laid upon the value of an acquaintance with anatomy both to the Physician and the Surgeon. It must be confessed, however, that from the latter was required a larger share of knowledge on this subject than from the former, inasmuch as the Surgeon had frequently to deal with disease by operation in which minutæ were implicated, and which the Physician was never called upon to treat; nevertheless it was incumbent on the Physician to be acquainted with many details that he might comprehend the relative positions of contiguous parts and the intimate connexion existing between remote organs, in order to determine the particular seat of the affection he was required to attend to. The Surgeon might be suddenly called to tie a bleeding artery, set a fracture, or reduce a dislocation, for all of which he was at once prepared through his knowledge of anatomy. The Physician undertook the treatment of a case of measles, rheumatism, or fever, and though his acquaintance with anatomy might here seem to be of little value, they must remember that in the complications and sequelæ of these complaints his anatomical acquirements would be brought into requisition. In connexion with the study of anatomy and physiology, they should render themselves proficient in a knowledge of chemistry, and through this source learn the composition of those textures they had been at so much pains to disclose. An acquaintance with the structure and functions of the body in health, and a knowledge of the diseases to which that body is subject, would be comparatively useless did they not make themselves familiar with the substances to be employed as curative agents under the title of Materia Medica. Closely allied to these subjects was the study of botany, a branch of Medical knowledge too generally neglected by students. He might remind them that should they practise their profession in the country, they would sometimes be expected to display a knowledge of botany lacking which they might be considered, even though unjustly, ignorant of still more important and professional matters. Having mastered the subject as it bears upon medicine, they might pursue it as an instructive, an elegant, and a pleasing recreation for

> "Not a tree,
> A leaf, a flower, but contains
> A folio volume. We may read, and read,
> And read again, and still find something new,
> Something to please, and something to instruct
> Even in the humble weed."

In concluding a very elaborate essay, Mr. Canton remarked that there were two objects which, during their career as students of Medicine, should form their mainspring of action—anxiety for the present, and solicitude for the future. A steady perseverance in the one would secure them ultimate success in the other. At the outset of their career, timidity—the feeble offspring of anxiety—might oppose a barrier to their progress, and impede the journey they had to undertake along the pathway of knowledge, which should be at once trodden with firm footsteps and hopeful heart; the further they proceeded, the less rugged would be the track, the nearer the goal, the more glittering the prize. The journey-end of their pupilage would be rewarded with that becoming satisfaction which engenders reliance on self, has sprung from merit, and been fostered to maturity by perseverance.

ST. BARTHOLOMEW'S HOSPITAL.

Dr. Frankland, after some preliminary remarks, in which he alluded to the great loss the Hospital had sustained during the past year in the sudden and sad death of the late Dr. Baly, proceeded to say that—In the present state of education in this country, few, although they might have long selected the Profession, could be expected to have acquired more than the merest rudiments of those sciences upon which the principles and practice of Medicine so essentially depended. Those sciences—namely, anatomy, physiology, chemistry, physics, and botany—would therefore claim their almost undivided attention during the ensuing year. Most of them would occupy positions in which the dignity of the Profession would be estimated in the immediately surrounding community by their acquaintance with these sciences, not merely in their technical applications to Medicine, but in their bearings upon those natural phenomena in the outer world which constantly

attract the attention of the observant, and occasionally even of the more ignorant portion of mankind. In questions arising out of such phenomena, the Doctor was constantly appealed to as the highest available authority, and it would be an evil day for the Profession when that confidence was shaken. The technical treatment of disease and the alleviation of suffering might have progressed, but the scientifically cultivated mind for which the Medical man had hitherto so justly had credit would no longer be associated with the titles of the profession. The maintenance of this dignified position of the profession was, however, becoming more difficult year by year. The scientific portion of the competitive examinations in the civil and military departments of the State was rapidly calling forth a scientific training which had hitherto been almost monopolised by the Medical Student, but which threatened soon to convert even the lower grades of officers in those departments into formidable rivals of the Doctor in the interpretation of natural phenomena. Dr. Frankland then remarked on the study of natural science as a means of mental culture, and also on account of its many applications to Medicine. He showed the connexion of Chemistry and Physics with Medicine by examining the relations between man and some of the more important forms of matter by which he is surrounded. Passing from the physical property of the atmosphere (on which subject he bestowed much pains), he spoke of its physical constitution, referring particularly to the supposed influence of ozone in purifying the air, and to the fallacy of the test which is now so generally used in meteorological observatories for the detection of this substance in the atmosphere. Without waiting to inquire into the grounds upon which the claims of ozone as a constituent of the air rested, numerous observers began to gauge the atmosphere for this purifying and health-giving body, and the indications of ozone test-papers were, and still are, believed by many to afford valuable information respecting the sanitary condition of the atmosphere. Contemplating the industry with which such observations had been made, it was painful to have to come to the conclusion that up to the present moment we had no reliable evidence whatever that ozone is present among the constituents of our atmosphere. He then alluded to the deleterious effects of organic matter in the air, and to its estimation by Dr. Angus Smith's test, which had proved that the air of Manchester contained on an average more organic matter than that of London in the proportion of 6 to 4, and the comparative rate of mortality in the two cities being as 31 to 24. This test had also proved that the air on the high grounds in the northern suburbs of London contained only about one-third as much organic matter as the air in the city; that there are human dwellings in our large towns which are surrounded by an atmosphere fouler as regards organic matter than that of a piggery, and that the amount of organic matter in the average London atmosphere is about ten times as great as that contained in the pure sea-breeze. The corresponding relations of water to human life were then reviewed. In noticing the presence of organic matter of animal origin in water, Dr. Frankland said that as the deleterious effects of water thus contaminated had been repeatedly observed, they had sufficient reason for looking with great suspicion upon these organic substances, and it became important that the Physician should contemplate them as belonging to the primary causes of disease. It was not sufficient, however, that he should assure himself of the purity of the particular water supplied to a district; it was absolutely necessary that he should convince himself that the water actually used in the house of his patient was not thus contaminated. This was indeed especially necessary in London, where the vicious system of intermittent supply and storage rendered the comparative pure water delivered by the Companies subject to contamination of a highly dangerous character. This water was stored in cisterns to which a fresh supply was only admitted every twenty-four hours. These cisterns were generally placed in the basement and in close proximity to several sources of gaseous pollution. When they reflected upon the power which water possessed of absorbing gases and vapours it was not difficult to conceive how its purity when thus stored must be seriously compromised. But these were by no means the only, or even the chief, sources of organic impurity. The overflow pipe from these storage cisterns was rarely efficiently trapped, and it consequently became a conduit for the conveyance of sewer gases from the drains on to the surface of the water in the cistern. The heated flues of every house established an inward draught through all passages communicating with the external air, and thus a most effective arrangement was provided for saturating the water with the soluble sewer gases. It was evident that this source of dangerous contamination was altogether independent of the quality of the water supplied to the house, and hence the necessity for vigilance in individual houses where disease showed itself. Dr. Frankland then alluded to the importance to the Profession of the study of physics or natural philosophy, which, although not included in the prescribed course of education, could not be neglected without seriously impairing that knowledge of natural phenomena which the public expected to find in Medical men. The address concluded with an earnest exhortation to those who were just entering upon Medical study to avail themselves of the advantages which the Hospital offered. They had come there solemnly to devote themselves to a noble profession, which perhaps more than any other required self-denial, constant study, and even much physical endurance. Let the way in which they passed through its portals show that they appreciated the true character of their calling, and that they were not undertaking its tremendously responsible duties as a mere matter of convenience, but that they were determined so to furnish themselves with all available knowledge as to be able efficiently to cope with disease, prolong life, and relieve human suffering. (Loud cheers.)

WESTMINSTER HOSPITAL.

Dr. Marcet said he had thought it advisable to take advantage of this opportunity to offer a few remarks on the methods of investigation in Medicine. Medical researches properly so called were not fit for the mind of a young man engaged in his Medical studies, still it was necessary that he should be possessed of a spirit of inquiry, this being, he believed, essential to his success in future life. Now, the qualifications for a proper spirit of inquiry were—1. The habit of thinking or reflecting. 2. The constant and unflinching desire for the promotion of truth. 3. Perseverance. He regretted to say that the habit of thinking or reflecting was not generally met with among young Students; their best efforts did not extend beyond what was necessary to confide bare facts to their memory, and, consequently, most of the new acquirements not being properly stored up in the mind, after a short time escaped from it. With respect to the promotion of truth, he was afraid it had happened, and might still occur, that for the sake of gain the doctrines of the most noble art, that of alleviating and curing the bodily sufferings of our fellow men, were perverted and made subservient to the mean objects of quackery and similar pseudo-Medical craft. He feared that the germs of this evil disposition occasionally appeared during the Student's Medical studies, to be developed in future life. He could not, therefore, too strongly impress upon the Students the importance of suppressing at once any such disposition. Medical knowledge was a sacred trust placed in their hands to be used for the benefit of mankind, and not a vile means of obtaining wealth by acting on the mind of an often too-credulous public. The third condition for a useful spirit of inquiry was perseverance. At first they would doubtless, all zealously set to work—their first efforts would be directed by an intense desire of inquiry into the structure of the human body, so beautifully adapted to the performance of its multifarious functions; into the simple and admirable chemical laws according to which one substance is transferred into another, without there ever being any loss of matter, and with the no less attractive history of the vegetable kingdom. He trusted that this commendable impulse might be lasting. They must not, however, deceive themselves, for they would meet with difficulties of many kinds—obstacles to overcome, temptations to resist, and should their perseverance slacken, they would be sure to regret the lost time when too late to make up for it. In order to show them the practical utility of a proper spirit of inquiry, he should offer a few remarks as to what was to be done and observed at the bedside, or during the professional visit. If they were present when any Physician or Surgeon, justly considered eminent, was engaged giving Medical advice, they would not fail to notice the gentleness he displayed, the care he exhibited of avoiding any question or act which might, perhaps,

give offence or be construed in such a way as to add to the uneasiness of the patient's mind. The confidence of the sufferer was first to be attained, and with this end in view nothing must be neglected. Having conquered his or her timidity, the next point was to inquire into the history of the case, bearing in mind more particularly those points which were most useful for the object of diagnosis, and then putting a series of appropriate questions with the view of ascertaining the state of health of every one of the great functions of the body. Being satisfied with the diagnosis, the cause of the illness was to be determined, and among those circumstances which disposed most to disease they would find habits to play an important part. For example, the abuse of alcoholic stimulants, or excessive smoking; living an irregular life; overtaxing the powers of the brain, especially by night-work; habits of indolence, with want of both physical and mental exercise; the habitual neglect of cleanliness. By paying attention to these circumstances much could be done towards effecting a recovery. In the Hospitals there was a cause of disease very frequent and painful to witness, namely, actual want of the necessaries of life. The Medical officers were every day consulted by care-worn, half-clad, and starving patients, to whose health bread and meat would afford far more relief than all the drugs of the Pharmacopœia. In narrow courts and filthy closes, women and men in the agony of intestinal affections, or in the last stage of consumption, borrow each other's clothes to go tottering to the Hospital to see the Doctor, and what must be the offspring of these unfortunate women? Such babies were brought to the Hospitals,—shadows of living creatures,—death from starvation was written on their wrinkled faces, and three days later the bereaved mother applied for a certificate of decease to bury her child. He had thought the occasion fitting to bring forward these remarks, in order to have an opportunity of begging them not to harden their feelings towards this class of patients. With them kindness and gentleness would go a great way, sympathy would soothe many a wound. A word of encouragement would give hope. The consideration of the treatment was, of course, equally important to that of the diagnosis, and it was urgent that they should be well acquainted with the action of medicines; and not only the diagnosis of disease, but also the safe and proper administration of drugs, required an acquaintance with every subject which entered into the curriculum of their Medical studies. The methods adapted for carrying on original investigation in Medicine might be conveniently divided into two classes:—1. The consideration of Medical statistics; 2. Original observations and experimental researches. The art of drawing statistical results from reported observations, although very simple in appearance, was attended with many difficulties. There existed an instinctive desire to make the most of any series of observations, and he suspected that it was because statistical tables had frequently been strained to the utmost that Medical statistics had fallen into disrepute with many distinguished Practitioners, who would remark with a smile that any result might be obtained from such inquiries. The last operation consisted of a series of calculations which required no great mathematical talent. He could assure them, however, from personal experience, that when the number of observations was considered, much care and attention were necessary in order to avoid mistakes. Before dismissing the subject, he was sure they would join him in paying a tribute of praise to Dr. Farr for his unremitting efforts towards the promotion of Medical statistics in this country. Original observations and experimental researches in therapeutics deserved particularly their attention, this branch of Medical science bearing directly on the treatment of disease, which was the final object of Medicine. After a careful study of the standard works on pharmacy, they would probably be struck with the extent of their knowledge of Materia Medica. It was, indeed, universally admitted that in this country the Medical profession had been at all times more particularly engaged with the study of the action of Medicine and treatment of disease. Let them remember, however, that with respect to this subject they must not depend entirely upon the information derived from books. They should be guided rather than taught by the published accounts of the therapeutical properties of Medical agents. They will soon find out that something more than the knowledge of their Profession acquired by reading was necessary for a successful practice, and that was experience. In conclusion, he urged upon the students to be steady, laborious, persevering. The prize they were aiming at could not be obtained without hard work, and a determination on their part to overcome every obstacle. He need not remind them of the maxim, "Where there is a will there is a way to success." They might rest assured that their efforts would be seconded in every respect by their lecturers and the other Medical officers of the Hospital, who, he was certain, wished them, as he did himself, every success in their Medical studies and professional career. (Loud cheers.)

ARMY PRACTICAL SCHOOL, CHATHAM.

The third Session of this School was opened on October 1 by an address delivered by Deputy Inspector-General Dr. Maclean, Professor of Clinical Medicine at the Military Hospital of Fort Pitt. A crowded audience filled the theatre, and included the Naval and Military Medical Officers of the garrison, and many of the leading Civil Practitioners of Rochester and Chatham. Major-General Eyre, commanding the district, and his staff; Colonel Harness, C.B., Director of Studies in the Corps of Royal Engineers; Colonel Collinson, R.E., and other Military Officers, were also present.

During the two former Sessions the Practical Classes at Chatham were attended by gentlemen who were only candidates for appointments in the Medical Service of the Army; but on this occasion the gentlemen, who are about to pass through the course of study, are Commissioned Officers, and have many of them been on active service in various parts of the world. In consequence of the reductions which have been made of late in the Military establishments of Great Britain, particularly in the Medical Department, the candidates who were gazetted to be Assistant-Surgeons have been all placed on half-pay; and the Director-General of the Army Medical Department, taking advantage of the return of various officers from foreign service, has now sent a class, consisting of twenty Assistant-Surgeons, from among this number to go through the course of study. The whole period of the session is to be devoted by them to this special work, precisely on the same footing as military officers of the ranks of captains and lieutenants are sent at stated periods to study in the service department at Sandhurst. Professor Maclean, after referring to the origin of the School, and describing the courses of study in its several branches, dwelt with much earnestness on the immense importance of preventive Medicine in the army, especially in tropical climates, such as that of the East Indies, where he had spent upwards of twenty years of his life in active Professional pursuits. He illustrated this importance by showing the number of European soldiers which, in consequence of the amalgamation of the Queen's and Indian armies and new arrangements, will have to be kept in the East Indies in future; and proved how impossible it would be for England to support the drain from its population which would be necessary to keep up such a force in the country if the old rates of mortality and invaliding were to be continued. He pointed out the great advantages for acquiring definite knowledge on practical sanitary matters, offered by attention to the course of manipulation in the Hygienic Laboratory, advantages which could scarcely be obtained elsewhere; and which embraced subjects on which Army Medical Officers were called upon to express opinion and advice almost every day in the exercise of their multifarious duties. The Professor then touched upon some of the important topics connected with Indian sanitation, which are under discussion at the present time: among others, the great question whether the troops shall be kept in the plains, or in hill stations, ready to be brought down whenever or wherever a necessity may arise for their services. He showed the many and strong arguments in favour of the latter plan, as far as Medical reasons were concerned, but admitted, at the same time, that it was a question which could not be discussed on Medical grounds alone, but that its political and military bearings must also be fully considered. He then alluded to the labours of the Indian Sanitary Commission and other more general subjects, and concluded an eloquent address by a warm eulogy on the character and labours of the late Secretary of State for War, Lord Herbert, who, just one year before, in the same room, had inaugurated the first session of the School, and had

made a fervid appeal to the Medical Officers then gathered together, to devote all their energies to increasing their professional knowledge, so as to prove by its application to the welfare of the soldiers, and by its results in diminishing the sickness which habitually existed among them and impaired their efficiency, that the improvements which had been effected in the Army Medical Department were as economical to the State as they had been just to the individuals who had benefitted by them.

At the conclusion of the address, General Eyre made some remarks to the Medical Officers, and congratulated the Principal Medical Officer on the exemplary conduct of the cadets who had passed through the two previous sessions. He remarked that, responsible as he was for the discipline of all officers of the garrison, it was a pleasure to him to be able to record that in no one instance had a complaint respecting any one of those gentlemen been made to him.

Inspector-General Dr. Muir, C.B., and the officers of the Medical Staff, entertained the General and other visitors at luncheon in the mess-room.

[The Reports of the other Introductory Lectures are unavoidably delayed until next week.]

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

Assistant-Physician to the Metropolitan Free Hospital.

A SURGICAL REPORT OF THE

CASES ADMITTED INTO

UNIVERSITY COLLEGE HOSPITAL,

FROM THE LATE ACCIDENT ON THE

NORTH LONDON RAILWAY.

By Mr. GANNON, House-Surgeon.

Patients under the care of Mr. MARSHALL.

The total number of patients admitted into this Hospital on Monday evening, September 2, was 35, three of whom were brought in dead.

The following is a brief account of the most important cases:—

Case 1.—Laceration of One Leg, and Compound Fracture of the Other—Amputation—Death from Collapse—Depressed Fracture of Skull.

Eva S., aged 12, admitted in a state of extreme collapse; surface and extremities cold; slight pallor of countenance; pulse very small and weak; patient conscious to a certain degree. On examination were found—1. A compound comminuted fracture of middle third of right tibia. 2. The whole of the fleshy part of left leg, from knee to dorsum of foot, completely torn off from the bones. No fracture of either bones. Very little hæmorrhage seems to have taken place. 3. Fracture of left humerus. An hour after admission, patient having somewhat rallied, Mr. Marshall deemed it advisable to amputate the left leg above the knee, which was done under chloroform by lateral flaps at junction of middle and lower third of thigh. There was remarkably little hæmorrhage, only one vessel besides the femoral requiring a ligature. About twenty minutes after operation, patient gradually sank into a state of collapse, from which she never rallied. Her pulse, however, showed she had recovered from the effects of the chloroform. Post mortem, sixteen hours after death.—Head.—On the left side is seen a depressed triangular fracture, an inch long, just above the mastoid process, squamous portion of temporal bone separated from parietal, membranes of brain opposite to and around fracture intensely congested. With exception of this injury to head, all the organs were perfectly healthy.

Case 2.—Fracture of Right Temporal Bone with Effusion of Blood.

Richard S., admitted Monday, September 2, quite insensible; extremities and surface generally cold; pulse small; severe contusion on right side of head and face, but no external wound; pupils act equally; breathing laborious; no fracture of ribs to be detected. About two hours after admission some frothy mucus, tinged with blood, was seen to ooze out of his mouth. From this time till his death, which occurred at 9 a.m. the following morning (twelve hours after admission), he remained in the same unconscious state. No blood was seen to come from either ears or nose. No signs of paralysis of limbs. Post mortem, sixteen hours after death, showed an extensive comminuted fracture of right temporal bone, opposite which is a large clot of extravasated blood, and a corresponding depression on brain-substance; fracture of right clavicle. All other organs perfectly healthy. No fracture of ribs, or laceration of lung-substance to be found.

Case 3.—Rupture of the Diaphragm and Other Severe Injuries.

Edward H., admitted September 2, quite unconscious; had violent jerkings of upper and lower extremities, which lasted till his death, fifteen minutes after admission, patient never having rallied. Post mortem, sixteen hours after death:—1. Extensive rupture of diaphragm on right side, through which the entire liver could be thrust into the thorax; blood extravasated into posterior mediastinum and on upper surface of diaphragm. 2. Fracture of first rib on right side, and partial separation from sternum; right pleura, wounded, contained two ounces of blood; lungs uninjured; heart healthy. Liver.—A little ecchymosis under peritoneal coat of right lobe, but no laceration. 3. Double fracture of pelvis passing through obturator foramen; loose spiculæ of bone projecting on left side into thigh; right side, spiculæ hang loose; no injury to urethra or bladder; extensive ecchymosis of subperitoneal tissue around bladder. 4. Severe compound comminuted fracture of right tibia and fibula at junction of middle and lower third. 5. Over right knee is a lacerated wound, extending from inner side of patella to outer condyle of femur and upwards for about three inches; it was through superficial structures only; just above inner condyle is a second lacerated wound, extending obliquely upwards and outwards for about three inches, also superficial.

Case 4.—Fracture of Ribs, and Laceration of One Lung.

Sarah C. On admission sensible; extremities cold; great pallor or countenance, pulse small and weak; was found to have fracture of right collar bone, and also of several of the upper ribs on the same side: her breathing was rapid and jerking in character, and attended with extreme distress; with each inspiration she uttered a sharp cry. She remained in this state throughout the night; slept but little; ordered Pulv. opii. gr. j. statim; a broad bandage was passed round chest. Tuesday, September 3.—On upper part of right side of chest there is considerable emphysema; vomited several times in course of night; no blood in vomited matter; towards evening patient ceased moaning, and sank into a semi-unconscious state, in which she remained till her death, at 2 a.m. on Wednesday. Post mortem, twelve hours after death:—1. Fracture of outer third of right clavicle. 2. Ribs, from second to seventh, fractured through their necks; fracture of first rib, and several broken in two, and even three places. Right lung.—About 1 oz. of bloody fluid in right pleura; lung itself small and collapsed; a laceration about 4 inches long and 1½ inches deep at posterior border; left lung uninjured; all other organs healthy; liver rather pale.

Case 5.—Fracture of the Left Scapula—Concussion of Brain—Recovery.

Isaac C., aged 27, admitted September 2 at 8 p.m. On admission patient was quite insensible. Marked pallor of countenance; extremities cold; pulse small and weak. No wound on any part of head; pupils act equally. Ordered hot bottles to feet, and brandy internally. Tuesday, September 3.—He remained insensible throughout the night, but towards the morning became conscious at intervals. Pulse 96; soft. On examination fracture of left scapula a little below middle is found, extending in a direction obliquely upwards; also some bruising of left shoulder. Pupils widely

dilated, but act freely; passes his water freely, bowels open. 4th.—Pulse 96, much better this morning, is now able to answer simple questions, complains of slight pain in head; skin cool, tongue moist. 5th.—Pulse 88, continues to improve. Respiration 24, pupils dilated, slept pretty well. From this date to the day he left the Hospital, which was on September 10 (five days) he progressed very favourably. At the time of his discharge had a fair amount of power over left arm and shoulder. Complained of no pain in his head; memory unimpaired; hearing and sight good.

Case 6.—*Severe Concussion of the Trunk without Fracture—Pneumonia—Recovery.*

George W., aged 38, signalman, admitted in a state of collapse. Perfectly conscious, great pallor of face, extremities cold, complains of great pain when pressure is made over abdomen; urine drawn off, contained no blood; no fracture of any kind to be found, breathing a little laboured. Ordered Tinct. opii ♏xx. statim. Tuesday, September 3.—A little improved, complains of great pain in chest and abdomen; passes his water freely, which is of a dark colour, containing a large amount of phosphates; still very pale in face; has a sense of tightness across chest; bowels not open; slept a little during night; can take a little food. Has nausea; pain over epigastrium; no particular pain over lumbar region. Tinct. opii ♏xx. statim. Also the following enema:—℞ Ol. ricini, ℥ij., ol. terebinth, ℥j., dec. hordei ℥xij. Two turpentine fomentations were applied to epigastrium. 4th.—Urine same as yesterday; pain over chest and abdomen a little relieved; has expectorated small dark-coloured clots of blood; breathing rather more laboured; some fine crepitation is heard just below right scapula. Ordered to be dry cupped over abdomen, and mist. effervescens, ℥j. sextis hôris. Pulse 126. 5th.—Pulse 101; respiration 48, quick; still continues to expectorate small clots of blood; urine dark-coloured; expresses himself as much relieved by the cupping; breathing rather emphysematous; tongue brown in middle; skin cool; slept well; bowels open yesterday; to be dry cupped over right side of chest. 6th.—Pulse 96, full; respiration 40; pain under right scapula still continues, and crepitation of a fine character is to be heard there as before; complains of no other pain unless he moves, and then all over right side of thorax; passes water freely; still expectorates blood, and some aërated mucus; bowels not open. Nine p.m.—Pulse 112; respiration 44. Ordered ℞ Pil. cal. c col. ij. statim, and Haust. doucet. ℥jss. cras mane, also the following mixture:—℞ Antim. pot. tart., gr. ¼; liq. ammon. acet. ℥ij.; aquæ ℥j. Ft. mist., ter die. 7th.—Pulse 94; respiration 24; no pain over right scapula (where he was dry-cupped yesterday), crepitation at this spot very faintly audible; expectoration diminished; blood is redder; the sputa has not the characteristic rusty appearance which is seen in pneumonia. 8th.—Pulse 92; respiration 24; did not sleep well; tongue clean; rather thirsty. Ordered an anodyne of morphia and henbane this evening. 10th.—Slept well; feels much better; pain in chest entirely gone; no crepitation to be heard below right scapula. Since this date patient has progressed favourably, and now walks about and states he is free from pain.

Case 7.—*Scalp Wounds and Concussion—Recovery.*

John W. H., aged 10, admitted on Monday, September 2, quite insensible. Great pallor of face; surface very cold; pupils act equally. About an hour after admission he was very sick, after which he improved a little, but not fully sensible till the morning. On examination were found: a scalp wound extending for an inch above left eyebrow for four inches over parietal regions (the bone is exposed, but no fracture to be detected,) where it is met by a short wound, passing at right angles to it down left side of head; also a small cut about the middle of forehead. There is at root of nose a deep transverse wound, with fracture of nasal bones, which are pushed towards the left side; eyelids bruised and swollen; three sutures put into wound over left side of head and strapping applied; water dressing applied to wound of nose. Tuesday, September 3.—Patient much better this morning, is now perfectly conscious, although suffering great pain in the head. Pulse 96, small; passes his water freely; bowels open; wounds doing well. 4th.—Pulse 102, quick; tongue red and moist, some fur in middle; skin hot and dry. Slept well during night; pupils act equally, are slightly contracted; pain in head continues. 5th.—Pulse 108, quick; skin hot; sutures taken out of wound, which is progressing favourably, although a slight tendency to bagging at one point; complains of dimness of sight. 6th.—Pulse 104, quick; respiration 20. Ordered ℞ Pulv. cal. c. jalap. gr. x., statim; also, tinct. hyoscyami, ♏ xv. nocte. 7th.—Complains of pain in both eyes; tongue red and moist; skin cool; bowels open; wounds doing well. 11th.—Since last note patient has been progressing very favourably; to day, however, he complains of pain in head, which feels hot; skin hot and feverish; pulse 116; head to be shaved and ice applied, and the following ordered: ℞ Hyd. chlorid. gr. j., ant. pot. tart. gr. $\frac{1}{12}$. Ft. pil., sextis hôris. 12th.—A collection of pus beneath scalp at the point where the two cuts on the head nearly meet; pain in head little relieved; skin not so hot; tongue cleaner; bowels open; feels better generally; water dressing applied to wound on sealp; the wound on nose is slowly granulating. Since last note up to present date, September 21st, the patient has done remarkably well; wounds healing rapidly; no pain in head; pupils act freely; is able to run about the ward.

Case 8.—*Collapse from Concussion—Recovery.*

Charles Albert H., admitted on September 2, in a state of extreme collapse; surface very cold; pulse small and weak; extremities cold; slight pallor of countenance; half-an-hour after admission patient vomited, after which he slept tranquilly through the night. No wound or bruise to be detected. Tuesday, September 3rd.—This morning patient seems quite well; has no pain in head; pupils act; bowels open. 5th.—Discharged perfectly well.

Case 9.—*Severe Concussion—Fracture of Jaw and other Injuries.*

Susannah F., aged 12, was admitted on Monday, September 2, quite insensible; feet cold; slight pallor of countenance; pulse small and weak. Hot water to feet and a small quantity of stimulants were ordered. On examination, there is found—1. Impacted fracture of right clavicle, about junction of middle and inner third. 2. Fracture of left fibula about lower third, with slight inversion of foot. 3. On sole of left foot is seen a contused and lacerated wound, extending across from base and outer part of great toe to right of fourth toe, and passing backwards about an inch and a half; no fracture of metatarsal bone detected. A good deal of hæmorrhage took place from this wound, which was stopped by the application of perchloride of iron and pressure. In dorsum of same foot is seen a wound about an inch in length, extending in an oblique direction from base of metatarsal bone of little toe to outer side of web between second and third toes. No apparent communication between these wounds. 4. Longitudinal fracture of jaw on left side of symphysis between canine and incisors. Right cheek much contused. A small wound opposite first molar tooth, which penetrates substance of right cheek, and communicates with mouth. 5. A small wound over left eyebrow. Extensive ecchymosis of both eyelids, especially the left. 3rd.—Has passed a very restless night, is now conscious at intervals, but still very drowsy. Complains of pain in head. Skin cool; pulse rather small. A little blood has passed with her urine; no injury to chest or abdomen to be detected; no blood from ear or nose. State of pupils unable to be ascertained on account of ecchymosis of both eyelids; has had slight diarrhœa since the night. 7 p.m.—Seems a little clearer; head rather hot; skin clammy; tongue covered with white fur; ordered tinct. hyoscyami ♏xv., statim. 4th.—Pulse 108; head continues hot; wound on foot doing well; water dressing applied to it; a leathern splint placed on inner side of leg; fracture of clavicle brought into position and put up in the usual way by means of a figure of 8 bandage. 7 p.m.—Is now perfectly sensible; pulse 120; very restless. 5th.—10 a.m.—Pulse 124, very quick; pupils equal; tongue covered with yellow fur; skin cool. She complains of pain in head. Ordered Antim. pot. tart. gr. $\frac{1}{17}$, sextis hôris. Appl. hirudines vj. to temples (three to each). A large amount of extravasated blood in conjunctiva of left eye. 6th.—Pulse 116; wound on sole of foot looks rather sloughy. Ordered to be poulticed. That on dorsum granulating healthily. 7th.—Pulse 128; still very noisy, talkative and restless. An erythematous blush was observed in the morning over right cheek, which became more tense and shiny towards evening. Skin hot; tongue dry; wound on sole of foot injected with Condy's fluid, and poultieed as before. A fan-tailed bandage was applied to

jaw, but owing to extreme restlessness of patient, could not be kept on; fragments, however, are in a very good position. Fomentations to cheek. 9th.—Red blush about right cheek has faded away. Skin less hot, not so feverish; passed a good night; bowels open. No blood has been seen in urine beyond that mentioned on the day after admission. 10th.—Since last note, patient has improved in every respect, but to-day there is observed a small abscess forming beneath left jaw, opposite seat of fracture; wounds doing well; that on sole of foot is less sloughy, is now dressed from the bottom with an astringent lotion; fracture of fibula is kept in fair position by the leathern splint on inner side of leg; poultice to abscess below jaw. 11th.—No distinct fluctuation is yet perceptible in the abscess; has had no rigors; skin cool; head not so hot, nor is there so much pain in it. 13th.—The contusion of right cheek and the ecchymosis of eyelids has now entirely subsided, but in left eye effused blood still remains, but having sensibly diminished since admission. 17th.—Abscess beneath jaw opened to-day, a good deal of pus escaped; a probe passed in, comes in contact with bare bone, which, however, is not carious. Since last note, patient greatly improved; wounds on left foot healing rapidly; fracture of clavicle is in good position; is unable to raise her arm to her head, but some amount of callus is thrown out; has no pain in head; skin cool; takes her food well. (Diet—milk, fish, beef-tea.) Blood effused in left eye is slowly being absorbed. 21st.—Patient continues to improve; wounds fast healing; complains of no pain; the penetrating wound of cheek nearly closed; bowels open; appetite excellent.

Case 10.—*Severe Contusions and Injury to Scalp followed by Inflammation of Liver.*

Sarah E., aged 28, admitted Monday, September 2, in a state of entire collapse. Great pallor of countenance; pulse very weak and small; extremities cold; perfectly conscious; pain near abdomen generally, but more especially when pressure was made above pubes; also suffers pain when pressure is made near the left lumbar region. She has also a contusion over Poupart's ligament on the right side. Ordered hot bottles to feet and brandy internally. During the first part of the night passed some blood with her urine, but when drawn off in the morning contained no blood. Slept but little during the night. A small scalp wound at the top of the head, with exposure of bone. Ordered Tinct. opii, ℥xx. 3rd.—A little improved; pain near lumbar region (left) somewhat better; still pain near pubes; pulse small; no injury to chest to be detected; breathing normal; has a good deal of nausea. Turpentine fomentations to abdomen. Scalp wound brought together by strapping. Ordered Hyd. chlor. ij., pulv. opii, gr.j., sextis hôris. 4th.—Pulse 114, rather fluttering. She now complains of pain when pressure is made near the epigastrium. Tongue dry, covered with a yellowish fur, shading into white towards the edges. Lips dry with sordes. Breathing scarcely, if at all, abdominal. 9 p.m.—Pulse, 120; respiration, 36; much quieter; fomentations continued. 5th, 10 a.m.—Pulse, 128; respiration, 38. Bowels were opened last night by a castor oil enema. Sleeps but little; lips dry; tongue still coated; face and conjunctivæ of a faint yellowish tint; passes water freely, but with some pain; complains of flatulence; breathing less painful. 9 p.m.—Pulse 120; respiration 32. Pain generally a little relieved. Has tinct. opii. ℥xx., every night. 6th.—Pulse 128, small; respiration 28; conjunctivæ rather more yellow; skin moist and cool; lips rather dry; has a good deal of thirst; right pupil little more dilated than left; abdomen very flaccid; pain over left lumbar region and pubes less; bowels open this morning. 9 p.m.—Pulse 136, feeble; respiration 28; skin cool; tongue beginning to clean at tip and edges; turpentine fomentations continued to abdomen; wound on head has rather a sloughy appearance, poultice applied; takes her food better. Ordered Tinct. hyoscyami, ʒij., æther chlor. ℥v., mist. camph. ʒj. Ft. haust. statim. 7th.—Pulse 124; respiration 28; tongue cleaner, fur less yellow; conjunctivæ still yellow, but not increased, nor has that on face; skin moist and cool; abdomen scarcely moves in respiration. 8 p.m.—Pulse 130; respiration 28; bears pressure over the whole abdomen much better. 8th.—Pulse 120; respiration 32; feels somewhat improved; still a little pain in micturition. 9th.—Pulse 121; respiration 32; slept during night; tongue has still the dirty yellow fur that it had a few days ago; complains of pain in head; slight pain in right iliac region, which is increased by the slightest exertion; wound on head still sloughy; poultices applied. 10th.—Pulse 118; respiration 24; tongue coated as before; sleeps at intervals; pain over abdomen continues, and also that on micturition; urine rather high-coloured; no albumen or deposit of any kind; bowels open. 12th.—Pulse 102; respiration 40; wound on the head continues sloughy; feels pretty well; pain over abdomen about the same; ordered to be dry cupped there; fomentations as previously. 14th.—Pulse 108; pain over abdomen much relieved, but pain on micturition remains, and, if anything, she states this is increased, and takes her some time to pass; ordered an aperient draught to-night. 15th.—Pulse 126; respiration 28; has pain after taking food; skin hot and dry; tongue clean, rather dry. 16th.—Pulse 142; had a rigor early this morning; complains of pain over eyes and some headache; has a feeling of faintness and sinking at the epigastrium; skin hot and dry; tongue dry; face flushed; ordered to repeat the calomel and opium pills of September 3. 17th.—Pulse 130; tongue dry, dirty-yellow fur; passed a restless night; had another rigor; pain in micturition much diminished; was dry cupped yesterday over abdomen and chest, from which she has experienced much relief; is now in no pain, but weak and faint. 2 a.m.; Pulse 140; skin hot; calomel gr. j., sextis hôris. Turpentine fomentations over hepatic region; wound on the head less sloughy; dressed from the bottom with warm water dressing. 18th.—Pulse 144; complains of nausea; had a good deal of retching; no particular pain anywhere; slept a little; gums slightly touched by the calomel; bone exposed in scalp wound, very white and dry; no pain in head; skin cool and moist; countenance anxious; omit pill, and take ext. opii. gr. ½ ter die. 19th.—Pulse 130; eyes look sunken, with a dark areola underneath; no retching since early in the morning; mouth still sore; tongue moist; has pain only at intervals; slight diarrhœa; fæces contained a quantity of bile and a few streaks of blood, with some mucus; experienced a good deal of pain when passing motions; yellowness of conjunctivæ diminished; wound in the head about the same; pupils rather dilated, right more than left; turpentine fomentations continued to abdomen. Ordered ℞ Bismuth trisnit. gr. v., acid. hydrocyan. dil. ℥iij. mucilag. acaciæ. ʒss., aquæ ʒj. Ft. haust., ter die. Gums still very sore; distinct mercurial odour in breath; complained of violent jerkings of limbs; has had no fresh rigours; abdomen flaccid and hot; no pain on pressure over any part of abdomen; pain on micturition gone. 20th.—Pulse 166, quick; retching continues; tongue dry, dirty yellow fur; very weak and faint; skin hot; temperature in axilla 106. 23rd.—To-day the patient seems much better; pulse fuller and stronger; has passed no more blood with the motions; gums still very tender; states she is now entirely free from pain; occasional headache; sickness much relieved; no pain on micturition; bowels open.

(To be continued.)

GUY'S HOSPITAL.

DISEASE OF THE TEMPORAL BONE ON THE RIGHT SIDE—DEATH—AUTOPSY—ABSCESS IN THE LEFT LOBE OF THE CEREBELLUM.

(Under the care of Dr. WILKS.)

Frederick B., aged 11½, was admitted on June 19. The boy seemed very ill, and was very thin. He appeared quite intelligent, and had never been otherwise, but spoke sharply. He had been suffering for some time from intense pain at the back of the head, and which his mother said his doctor had called tic douleureux. It was at once observed that he was deaf on the right side, and had a discharge from the ear. There was no pain or tenderness over the bone. The pain at the back of the head was paroxysmal. He had often been sick. Respiration irregular; pulse natural and small; pupils dilated, inactive, but there was no complaint of sight. He was very feeble, so that he with difficulty sat up in bed. There was never any disturbance of intellect. It was tolerably clear that the boy was suffering from cerebral disease, and Dr. Wilks diagnosed abscess in the cerebellum. He died June 25.

Autopsy.—The surface of the brain and the membranes were

natural. The ventricles contained a large excess of clear fluid. On attempting to remove the brain, the right lobe of the cerebellum was found to be closely adherent to the fossa and to the posterior surface of the temporal bone. On lifting it up the lobe burst open and discharged a large quantity of viscid pus, without odour. The whole lobe was converted into an abscess. On removing the dura mater, the bone presented very little alteration, but a probe passed into the external meatus, entered the tympanum, and felt the bone hard.

YORK COUNTY HOSPITAL.

CASE OF FEIGNED EPILEPSY—INTRODUCTION OF FOREIGN BODIES INTO THE BLADDER.

(Under the care of Mr. KEYWORTH.)

[Reported by Mr. ROBERTS, House-Surgeon.]

Mary Jane C., aged 21, a well-dressed, good-looking young woman, unmarried, but with a child four months old in her arms, presented herself at the Hospital on the morning of August 24, complaining of retention of urine. She gave the following history of her complaint:—Three years ago, while living as a servant in London, she fell down stairs and hurt her back. She was taken to St. Bartholomew's Hospital, where, she states, she had a bone removed from her spine. On examining her spine I found a short scar about the middle of the lumbar region, but the bones were perfect. She did not lose the use of her limbs, but retention of urine came on, and she was, she says, placed under the influence of chloroform fourteen times in order that something might be done to her bladder. She left the Hospital unrelieved, and was supplied with a catheter to draw off the water herself.

A few weeks ago she lost the catheter, and, being unable to purchase another, she made use of a piece of tobacco-pipe instead. In the early part of August, while working as a washerwoman in Scarborough, she accidentally broke the tobacco-pipe in the bladder. She thereupon applied to Mr. Easton, a Surgeon of that place, to have it removed. He placed her under the influence of chloroform, and "cut her and removed a long piece." This is her account of it. She now began, for the first time in her life, to suffer from frequent attacks of epilepsy, and the retention of urine continued. A week after the operation she again applied to Mr. Easton, and he removed a second piece of pipe from the bladder, under chloroform. This was two days before she presented herself at this Hospital. I understand from Mr. Easton that the latter part of her tale is substantially correct, but he says he suspected she was imposing on him when she presented herself to have the second piece removed.

The following are my notes of the case:—

August 24.—Beyond some little anxiety of countenance she appears to be in perfect health. She states that she has not passed any water for sixteen hours, and that she is quite certain she has got a piece of tobacco-pipe in her bladder. On passing a catheter, I found the urethra very much dilated, and the bladder to contain only an ounce of water. This was early in the morning; at noon, Mr. Keyworth easily detected the presence of a foreign body in the bladder by means of a sound, and at the same time noticed the very large size of the urethra. On account of this latter circumstance, and finding he could introduce the index-finger and a pair of forceps into the bladder, he did not wait till the patient was under the influence of chloroform, but moved with facility a piece of tobacco-pipe about two inches long. It was quite free from incrustations, but was rough at one part of the surface from a defect in its manufacture, which made it appear a very unsuitable piece for the purpose for which she said she had used it. As soon as the operation was over, and the effect of the small quantity of chloroform she had had passed off, and before she had been removed from the operating-table, the whole of the muscles suddenly became relaxed; the eyes turned up, the head rolled off the pillow, the arms dangled by the side of the table, and the legs became extended. Everything was passive. As these were unusual symptoms, and the pulse and the breathing were unaltered, I remarked to the nurse who was standing near, "This looks like a piece of acting—bring me some cold water;" whereupon the patient squeezed through her lips a quantity of frothy blood. She was removed to bed, and had several similar attacks during the afternoon and night, always frothing blood at the mouth.

25th.—Complains of pains in the legs. Tongue clean; bowels not open for three or four days; no appetite. Had a restless night. The night-nurse remarked that she never had a fit while she sat near her, but immediately she left to see another patient she went off in a fit, and continued in it till she returned. I observed that her fits were not real epileptic fits; that such fits generally began with firm clasping of the hands and rigidity of the limbs. I told the nurse to send for me the next fit she had. I had hardly got out of the ward when I was called back to witness a fit exactly according to my programme. Some aperient medicine was given, and some morphia ordered for bed-time.

26th.—Had a restless night, and complains of very great pain in the legs. It was necessary to draw off the water yesterday, and this morning it was quite healthy. I examined the tongue carefully, but could not find the slightest wound upon it, and cannot detect where the blood comes from which she produces in such profusion when she has her fits. I ordered the nurse in the patient's hearing, to place a large sheet of water-proof cloth under her, and to place a pail full of water near the bed, and to let me know if she had any more fits. She got up shortly after I saw her, dressed herself, and left the Hospital.

Note.—I think there can be little doubt but that this patient was an impostor. It is exceedingly improbable that a piece of tobacco-pipe could have broken into three pieces in the bladder. The epileptic fits were certainly not genuine. I hope if she should come under the notice of any of your readers, she will be closely watched.

Medical Times and Gazette.

SATURDAY, OCTOBER 5.

LEUKÆMIA.—BENNETT *v.* VIRCHOW.

A MEDICAL friend tells us that when wandering last winter through his old student-haunts in "the cold gray capital of the North," his eye was attracted by one of those caricatures in which students delight to express their sense of the ridiculous. It was depicted on the wall of a lobby leading to the lecture-room of an "Edinburgh Professor," and represented a figure dressed in a long coat reaching to the ankles, with the legend issuing from the mouth, "*Down with —— and Virchow.*" Inquiring into the signification thereof, he was informed that it probably referred to the "animated controversies" which a certain Professor held with "—— and Virchow" (in their absence) in his class-room.

"Down with Virchow!" was the burden of a leading article of the *British Medical Journal* of the 12th of January last, in which that eminent Physician and Pathologist was represented as a general plagiarist, and which professed to be a review of his Cellular Pathology. "In the same manner," the writer observed, "that the author [Virchow] has derived his leading views as to cells from one Edinburgh Professor, so he has borrowed, and equally without acknowledgment, his notions concerning leukæmia from another, viz., Professor Bennett. . . . . Indeed, throughout the book will be found a general appropriation of the ideas of other Pathologists," etc. Particular circumstances attracted attention to this personal attack on Virchow, and from internal evidence it was generally attributed to Professor Bennett himself. We have twice pressed this opinion on the Editor of the *British Medical Journal*, so that he might explain or deny the very serious imputation which it implied. In the number for September 14 there is, at last, an answer attempted to our strictures, in which the writer craftily invites us to discuss the Virchow *theories*, which we decline to do: our business is with the charges of plagiarism which are brought against the eminent Berlin Pathologist, and with which the

truth or error in his theories has no connexion. Past experience ought to have taught the "other Edinburgh Professor" more caution. First, Professor Virchow himself, then Professor Köliker, and after these Dr. Murchison and other correspondents of this Journal,(a) completely demolished all his pretences to originality, and refuted all his charges against Virchow. But as he desires further inquiry, he shall have it; and we trust that our readers will bear with us while we expose the tortuous line of conduct followed in this matter by this scientific offender and his editorial accomplice. Inasmuch as a good repute in the scientific and professional world is very often the only reward for scientific labours, and the only honourable way to high professional success, it is no light social offence to deprive the labourer of his hire, either by appropriating the results of his labours, and therewith the merit, or taking them from him under the pretence that they are stolen goods. But the combination of the two is such a nasty mixture of offences, that the punishment thereof ought to be provided for by our ordinary Courts of Justice. Now, in the absence of any such provision, the sufferers can only appeal for redress to the Grand Jury of the Public. But the questions raised by Professor Bennett and his abettor, the Editor of the *British Medical Journal*, have more than a personal importance, inasmuch as the course of conduct they have attributed to Professor Virchow must, if he be guilty, prove injurious to scientific progress, for the same reason that the cheating and robbery of honest merchants interfere with the spread of commerce,—and all this the more because of Professor Virchow's eminence. For these reasons, then, we trust to have the approval of our readers for deliberately bringing the accuser and accused into the Court of Public Opinion, and submitting to its verdict both the evidence adduced and the conduct of the accuser.

In the *Edinburgh Medical and Surgical Journal*, for October, 1845, Dr. John Hughes Bennett, being then Pathologist to the Edinburgh Infirmary, published a Medical history of a patient entitled, "Case of Hypertrophy of the Spleen and Liver, in which Death took place from Suppuration of the Blood." He prefaced his history thus: we quote from the separate impression circulated by the Author:—

"The very remarkable case about to be related derives unusual interest from its similitude in almost every respect to the one just recorded by Dr. Craigie. Although the most evident lesion during life was enlargement of the spleen, I agree with him in thinking that the immediate cause of death was owing to the presence of purulent matter in the blood, notwithstanding the absence of any recent inflammation or collection of pus in the tissues. Numerous authors have asserted (Bichat, Ribes, Gendrin, Andral, Bouillaud, Carswell, etc. etc.) that they have found purulent matter in the blood, independent [independently] of any local inflammation or abscess from which it could have been derived. Hitherto, all such statements have been very vague, because no measures were taken to ascertain whether this purulent-looking matter was really pus. We frequently meet with animal fluids, which to the naked eye resemble pus, although when more minutely examined, they are found deficient in the peculiar cells that characterise that morbid product. Gulliver more especially has pointed out that the colourless coagula which form in the heart and large vessels break down mechanically or by maceration into a pulpy mass or fluid. The purulent collections in the heart and blood-vessels, described by Gendrin and Andral, are considered by him to be fibrin softened in this manner. Again, we know that the blood in a state of health contains a number of colourless corpuscles, which closely resemble those of pus. Hence has latterly arisen the opinion, that the isolated pus corpuscles, described by some authors, were only the normal structures of the blood, and that where after death large intra-vascular collections of purulent-looking matter were discovered, they were caused by softened colourless coagula."

It will be observed, that the whole gist of these introductory remarks is to disparage the researches of those numerous inquirers who stated that they had found pus in the blood independently of any local inflammation or abscess, partly on the ground that they were bad observers, partly because other observers had concluded that the appearances upon which the opinion was founded were due to the presence of colourless blood corpuscles. Mandl claimed, in 1838, the discovery of these latter, but they had already been distinctly pointed out by Hewson. In 1838 Dubois showed their presence in the blood of "scrofulous" patients. In 1841 Mr. Gulliver figured the "white globules" and "pus-like globules," he observed in great numbers in the blood of a diseased horse (b). In 1843 Dr. Addison showed how they multiplied in the web of a frog's foot when "inflamed," and figured them (c). Opinions were much divided as to the true nature and origin of these bodies; on the one side they were considered purulent, on the other to be modified blood corpuscles, in accordance with the doctrine of Hewson. Now, Dr. Bennett could not venture to claim the discovery of these corpuscles, or the first promulgation of either theory advanced to explain their origin. He, therefore, having disparaged all previous researches, set forward his own facts and opinions as eminently superior and as decisive for the purulent theory—because presenting, as he believed, that precision in logic and investigation in which the others were defective. He writes:—

"In the present state of our knowledge, then, as regards this subject, the following case seems to me particularly valuable, as it will serve to demonstrate the existence of true pus formed universally within the vascular system, independent [independently] of any local purulent collection from which it could be derived. The individual entered the clinical ward of the Infirmary under Dr. Christison, to whom I am indebted for the history of the case. The *post mortem examination* and microscopic investigation were conducted with the greatest care by myself and my assistant, Mr. Morris."

The reader will naturally ask what we are about, for it will seem impossible that a communication, in which Dr. J. Hughes Bennett undertakes to *demonstrate* "the existence of *true pus* formed universally within the vascular system," can be identical with that upon which he founds his claim to the discovery of leucocythemia, or white-cell blood, and from which Professor Virchow plagiarized his notions regarding leukæmia. We are, however, quite serious; this is the original and wonderful paper, and these are the objects of it, as stated by the Author. Nor is the context at variance with the preface. Dr. Bennett leaves out nothing which will serve to prove the proposition that there was "suppuration of the blood" (whatever that may be), and shows—1. That certain veins contained a fluid which "resembled thick, creamy pus," or "thick pus;" and 2. Adduces proofs drawn from a careful microscopic and chemical investigation of the blood of the patient.

"The yellow coagulum of the blood was composed of coagulated fibrin in filaments, intermixed with numerous pus corpuscles, which could be readily squeezed out from it. . . The corpuscles varied in size from the $\frac{1}{800}$th to $\frac{1}{1200}$th of a millemètre in diameter, they were round, their cell-wall granular, and presented all the appearance of pus corpuscles. That they really were such was proved by the action of water and of acetic acid, the former of which caused them to swell and lose their granular appearance, etc.

"The red portion of the coagulum contained a large number of these pus corpuscles. . . . The pus corpuscles above described were found in the blood throughout the system," etc.

Appended to the history are "Remarks," in which the things observed are discussed and it is enquired, "Were the corpuscles observed pus corpuscles or blood corpuscles, the only bodies with which they can be confounded?" The reply is:—"With regard to the colourless corpuscles of the blood,

(a) *Medical Times and Gazette*, March and April, 1856.

(b) Translation of Gerber's Anatomy, App. p. 20, and fig. 269.

(c) "Transactions" of the Provincial Medical Association.

we know of no instance where they existed in amount, *or ever presented the appearance described.*"

"When, then, we take into consideration the existence of these corpuscles throughout the vascular system, their general size and appearance, and above all, the changes they underwent on adding water and acetic acid, *there can be little doubt that they were true pus corpuscles.*"

And here we will introduce, *en passant*, a remarkable interpretation of these arguments by their author.

When Professor Kölliker, in 1854, naturally quoted the last paragraph but one and others in proof that Dr. John Hughes Bennett "declares the corpuscles in question to be pus-globules" (d), Professor Bennett replies, "From this passage Professor Kölliker draws the inference that I denied that these bodies were the colourless corpuscles of the blood. But I need scarcely point out that the passage does not fairly bear that construction. On the other hand, it clearly shows that the possibility of their being these colourless corpuscles was fully entertained" (e).

It is difficult to decide which in this passage is most exquisite, Dr. Bennett's candour or logic. It is quite true he "entertained the possibility, for the reason he had already alleged, that not a few observers entertained the *probability*, but then it was only that he might emphatically deny it!

Having thus arrived, demonstratively, at the conclusions that in this case these corpuscles *were pus corpuscles*, and the disease really what he entitled it, namely, "Suppuration of the Blood;" he next proceeds to enquire how the process of suppuration took place and pus-corpuscles were found. He gravely discusses, *inter alia*, and sets aside the theory of Piorry, namely, that in these cases there is a "hæmatitis," or inflammation of the blood. "But can we explain the production of pus," he asks, "independent [independently] of inflammation? We reply in the affirmative."

"The corpuscles of pus arise in a blastema formed of *liquor sanguinis*. This fluid, when exuded through the blood-vessels, does not thereby in itself undergo any change. If any circumstance, therefore, [*sic in origine!*] should arise by means of which it could be separated from the red corpuscles within the vessels, there is no reason why these pus-cells should not be formed in it. Facts point out that this coagulation happens not unfrequently. Clots have been diagnosed in the heart and large vessels during life. Cases are recorded," etc., etc. "That under such circumstances pus corpuscles are occasionally formed I have had numerous opportunities of satisfying myself. . . . Positive facts, therefore, indicate that pus [not pus corpuscles] can form in *liquor sanguinis* within the vessels independent [independently] of inflammation."

Not content with this bald theory, Dr. John Hughes Bennett goes still more profoundly out of his depth. He finds in the fact that "the whole mass of blood was affected" with suppuration, an important point of difference from those cases in which "the pus was prevented entering into the torrent of the circulation, either by unchanged portions of coagulable lymph or by organised membrane which surrounded the clot," and asks, "How is this to be explained?" The explanation, he answers, is to be found probably in the chemical theory of zymosis, "which attributes fever to a process similar to that of fermentation in the blood." And he declares that "many facts in pathology are in harmony with this theory, more especially all we know of the formation of pus in the blood."

Such, then, is the communication in which Dr. Bennett first promulgated his doctrines of "Leucocythæmia," or white-cell blood, and from which he affirms Professor Virchow plagiarised his notions regarding Leukæmia, and without acknowledgment.

Let us now turn to the original communication of Professor Virchow. It aimed to establish the fundamental proposition that the corpuscles in question were blood-corpuscles devoid of colouring matter, and so numerous in the blood as to render it whiter than natural. Hence the term *Leukæmia*, and it hinted at the probable theory of their formation—namely, in the spleen or "blood glands." It is significant of the difference in mental calibre of the two men, that, working upon the same class of cases with the same advantages as to previous researches, and publishing the results of their inquiries within five or six weeks of each other, the one should have developed doctrines which have proved to be utterly untenable, while those of the other have attained an established position in pathology. His first communication appeared in the November number of "Froriep's Neuen Notizen," for 1845. In this he described a disease of the blood, under the term Leukæmia, which he alleged is characterised by an excess of colourless corpuscles, with enlargement of the spleen. He strongly maintained that these corpuscles were not pus corpuscles, but true, although colourless, blood corpuscles. And this, on the ground that there was no inflammation of the veins—that pyæmia, so called, was not a pus disease of the blood at all—that there was no reason whatever for the opinion that pus corpuscles could be, or ever were, formed in the blood spontaneously—and that microscopic evidence was worthless in the matter, because under the microscope the colourless blood corpuscles could not, he affirmed, be distinguished from pus corpuscles. In short, he took precisely that line of inquiry, and arrived at those conclusions, which were most opposed to Dr. J. Hughes Bennett's "notions" and method. Dr. Bennett has repeatedly insinuated (f) that Professor Virchow lies when he affirms that he had not even seen Dr. Bennett's history at the moment he wrote his own, upon no other grounds than that there was time enough between October and the date of publication of "Froriep's Notizen" in November for that purpose; but the whole tenor of Virchow's arguments proves that if he had really seen Dr. Bennett's history when he prepared his own paper, he would have strongly controverted the opinions therein advanced as to the purulent character of the blood in these cases, for the obvious reason, that they were directly opposed to his. And accordingly, in the *Medicinische Zeitung* for August and September of the following year, when further developing his theory of Leukæmia, he most plainly and positively controverts Dr. Bennett's "notions" about the "suppuration of the blood," while Dr. Bennett as persistently maintained them.

From this date Professor Virchow developed his theory in successive communications until, in 1847, he collected a number of cases, distinctly specified and characterised two forms of leukæmia,—the lienal, or splenic, and the glandular,—and placed the entire pathology of the disease upon its present basis. The consequence was that all the "notions" about "suppuration of the blood," and "thick creamy pus" in the veins, and "pus corpuscles throughout the vascular system," and the explanation of the "suppuration" by the theory of zymosis which Dr. John Hugues Bennett had "demonstrated," were sent to the *limbo* of all false theories. Never was discomfiture more complete; and Dr. Bennett silently accepted it. Having done this, his next step is best told in the words of Kölliker, which exactly state the facts:—

"Four years after Virchow [in 1847] had correctly interpreted the nature of these morbid appearances, and arrived at a correct appreciation of the physiological importance of leukæmia, ... we find Bennett again in the field. In the year 1851 (*Monthly Medical Journal* for January, April, August, and October, and in the year 1852 in a separate work

(d *Edinburgh Monthly Medical Journal*, October, 1854, p. 374.

(e) *Ibid.* p. 379.

(f) Clinical Lectures.

entitled 'Leucocythæmia; or White Cell-blood,') Bennett, without alluding in any manner to his former views of the nature of leukæmia, and without the slightest notice of the labours of Virchow, or the results obtained by him, now adopts in full the opinion and views of that gentleman, with the single and sole exception of the name, which he changes to leucocythæmia" (g).

It seems hardly possible that Professor Bennett, in doing this, could hope to escape the crushing exposure which followed, and he was quickly called to account for his conduct by Virchow in a note published in his *Archiv.* for August, 1852.

With a presumption as foolish as it was audacious, Dr. Bennett now flatly asserted that the doctrines of white cell-blood were his own, first developed by him in the case we have examined, and that Virchow had not only got his "notions" from Dr. Bennett's researches, but had either "purposely misrepresented" them, or was "profoundly ignorant of the English language"! This necessarily led to a further investigation of the question, and produced the severe but scholar-like rejoinder from Professor Kölliker, to which we have already referred, who, most successfully defended his colleague from Professor Bennett's charges. All that the "Edinburgh Professor" could do in reply was to shed so much inky excreta as might serve to facilitate his escape from his captor. His flounderings on this occasion we have partly shown; they are further illustrated by the following extraordinary admission he then made, and which should have settled the whole matter:—

"Having shown that the cells observed closely resembled those of pus in their structural and chemical character, [which was admitted by all], I said so, and concluded they were pus corpuscles [which was denied by many]. But having also demonstrated [as several observers according to his own showing had done before him] that they could not have been derived from any inflamed tissue, it only remained to be concluded that these bodies were formed in the blood itself, constituting a primary suppuration of the blood. Here, I contend, was the real discovery, which was at that time quite new, and remains up to this hour [October, 1854] in my belief a correct generalisation." (h)

If there be any meaning to be attached to the English language, as used by Professor Bennett, it follows plainly from this passage, that in October, 1854, as in October, 1845, he held the disease, which in 1852 he termed Leucocythæmia, to be "a primary suppuration of the blood," and that pus corpuscles were "formed in the blood itself;" that this was "the real discovery" he had made—"quite new," and up to that date a "correct generalisation." And, consequently, that these were the "notions regarding Leukæmia" which Virchow "borrowed" from him "without acknowledgement."

And here this controversial farce ought surely to end, with so complete a *reductio ad absurdum;* but there is another phase of it since that date which we must notice, if only in self-defence. Should any of our readers, with a very natural incredulity as to the foregoing facts and conclusions, turn to the Second Edition of Professor Bennett's "Clinical Lectures" (1858) for the purpose of collating our quotations with the history of the case as therein given, they will be struck with the great discrepancy between Professor Bennett's text and ours; and the more so because Professor Bennett affirms that his is a "*verbatim*" reprint of the original history, as published in 1845. And under these circumstances it will be equally natural for the reader to conclude that the extent to which Professor Bennett appears to contradict himself is only conceivable on the supposition that it is we who have not quoted his statements *verbatim.* Now, a reprint *verbatim* is a reprint word for word; or with only such alterations as are required by errors in typography, or in punctuation. When new words or terms are needed to make the original meaning clearer, they are permitted, if put within brackets, or otherwise shown to be deviations from the original text. We invite, with this explanation, our naturally incredulous readers to collate the text of the original history, either as circulated by Dr. Bennett in a pamphlet form in 1845, and which the title page affirms is "from the *Edinburgh Medical and Surgical Journal*, No. 165," or as published in that Journal with the text of the "case," as reprinted in the Second Edition of the "Clinical Lectures," and which Professor Bennett asserts is a *verbatim* reprint, and he will at once find that that assertion has no foundation in fact. On the contrary, he will see that *the history is so altered* as to present *an aspect wholly different from that of* 1845. Or more particularly, the original will be found garbled in the reprint as follows:—

1. Professor Bennett has suppressed in his alleged *verbatim* reprint the introductory remarks of the original, which we have quoted, and which alone would serve to prove that his accusations against Virchow are false.

2. He has altered the descriptive title of the original, by omitting the words "Suppuration of the Blood," and inserting "Leucocythæmia Discovered after Death."

3. In the accounts of the microscopic examination, he omits the phrase "pus corpuscles," and inserts "colourless corpuscles," wherever necessary to suit his purpose.

4. He omits wholly the assertion in the original, that his reaction of the corpuscles when treated with water and acetic acid, proved them to be pus corpuscles, describing the reaction simply.

5. He likewise omits the arguments given in the original to prove that the corpuscles were *not* white blood corpuscles.

6. He omits wholly the "Remarks," which in the original occupy more than five octavo pages, giving a few such extracts as suit the purpose he has in view, but carefully suppressing the arguments he originally adduced in favour of the purulent "notions" and the wonderful theory of the production of pus in the blood by zymosis.

By these alterations he makes it to appear that he held Virchow's views in October, 1845; and by asserting that the reprint thus garbled is a *verbatim* reprint of his views as published in 1845, he produces evidence which proves to those who believe his assertion that in that year he discovered "Leucocythæmia," and so establishes his charge against Virchow of unscrupulous plagiarism.

We here leave the verdict in the case to the gentlemen of the jury of professional opinion, and while the Professor stands down, we will bring into Court his accomplice and abettor, the Editor of the *British Medical Journal.* In the number of that *Journal* for January 5 last, the Editor affirmed in his leading article that this was "a *Journal* which represented no individual interests, which is swayed by no party feelings"; and solemnly declared his "trust that it will continue to be, as it always has been, a faithful exponent of those higher sentiments and feelings, which apart from the mere science and practice of the Profession, are necessary to give grace and credit to our vocation." Having printed and published these fine sentiments, in his next number he makes the *Journal* a vehicle for a personal and false charge against the honour of an eminent, most laborious, and most successful inquirer after truth. We do not doubt what the verdict of the gentlemen of the jury will be in this case.

This Editor has, however, attempted a defence in the number of his *Journal* for September 14, by declaring his creed. "Our belief is," he affirms, "that the more the subject of leucocythæmia is investigated, the more clear it is that the latter pathologist [Professor Bennett] first published an account of that morbid condition of the blood. If we are

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(g) *Edinburgh Monthly Medical Journal*, 1854, p. 376.

(h) *Edinburgh Monthly Medical Journal*, October 1854, page 378.

wrong, let the aforesaid Editor point out the error. This would be much more wise than asking questions which he well knows deserve no answer, and will get none; much better than framing hypotheses, and then building up abuse on them." Our kind monitor will observe from the foregoing that we have complied with his request, and we hope that he is now satisfied.

THE WEEK.

William Maloney, an Irish labourer, has been found guilty of the wilful murder of his wife. It appears that after no unusual quantity of drink during the forenoon, he went home to his midday dinner, and that, during an altercation, he stabbed his wife with a knife. Mr. J. B. Payne, the Surgeon, deposed that he found the deceased lying on the floor quite dead, with a wound in the neck just over the left collar-bone. The wound was not transverse, but followed the line of axis of the cavity of the chest. The knife, with which the deed was done, was found sticking in the boards of the floor behind a tea-tray. The prisoner's hands and clothes were bloody. He stated that the woman snatched up the knife and stabbed herself with it, at the same time saying, "I have done it, and now we shall not have any more jaw!" The question, then, to be decided was, Did the woman kill herself, or did the husband do it? It was admitted by the Surgeon that the wound was one which she could have given herself. On the other hand, it was improbable that a woman would exercise the force required to drive a knife such a depth into the chest; that she would have thrown the knife behind the tea-tray; that her husband's sleeves would have become bloody (for he refused to touch the body), and that she would have uttered so many words consecutively after such a wound. But, admitting that these objections to the prisoner's statement might be overruled, there remains the evidence of a man, a labourer without work, who was sauntering about, and chanced to look into Maloney's apartment at the very instant when the murder was committed, which he thus witnessed. Now, unless this man be held to have committed a most base and purposeless perjury, and unless it can be believed that he forged a statement out of his own head, entirely consistent with the facts deposed by the other witnesses, his statement must be accepted as confirmatory of the circumstantial evidence, and of the justice of the verdict "Guilty," which the jury found.

There has been a genuine human holocaust at last. On Saturday, the 14th ult., there were 1500 persons in the Continental Theatre of Philadelphia waiting for the ballet. Just at this time, Miss Gale, who was about robing herself in ballet costume, somehow flirted her dress into a jet of gas, when it was instantly ignited. Before the young lady could recover from her fright, her clothing was all in a blaze, and her sisters and several of the ballet girls from an adjoining dressing-room, rushing up to assist her, were in turn set on fire. About a dozen of these helpless girls were thus burning at once, and the fire ran over their gauze and among their under clothes, making fast to the close leggings or "tights," and literally burning to the bone. Their screams were thrilling, and no scene of horrors that the stage ever witnessed may be compared to the terrible picture behind the scenes, where the fire from the burning dresses blazed up to the ceiling, and singed the lashes and hair of the affrighted women. Miss Cecilia Gale, writhing, and still in flames, darted down the stairs, and was caught by Mr. Bayard, a stage carpenter, who at once tore up the sea cloth, a sheet of canvas used to make waves, and wrapped it around her. He was much burned while doing this. The young lady was removed to the Hospital soon afterwards. Several girls leaped into the street through the second storey windows. Six of the sufferers had died up to six o'clock next day. It is probable that two or three more will not survive. The coroner's inquest on the victims of the late accident at the Continental Theatre rendered a verdict exonerating manager Wheatley from all blame, he having used all precautions to prevent accidents. The dresses had not been made incombustible, therefore "all precautions" had *not* been taken against an accident that is now notoriously common.

The death from burning, of a poor woman in Lillington-street, Pimlico, presented some singular features. The deceased, a half-imbecile woman, aged 51, subject to epilepsy, was left for a few minutes in a room with a very small fire, when she contrived to set herself on fire, walked out into the area, and was there with her clothes burning, apparently unconscious of the fact, till a man passing by called out, "Missis, your clothes are on fire!"

There are newspapers which infest suburban districts, and which are commonly called penny local papers. Such papers are consecrated to the oratory of Boards of Guardians, the legal dicta of County Courts and Coroners' inquests, the squabbles of tradesmen, the petty scandals arising out of affiliation, cases at the Petty Sessions, the tea-meetings at Dissenting chapels, and at times a considerable amount of puffery. A correspondent sends us the following extract, which purports to be a report from the Master of the Workhouse to the Fulham Guardians. The only thing which could make us doubt that the Medical Officer of the Fulham Union was capable of effecting such wonderful cures, would be the fact of his submitting without a protest to such an illiterate puff as the following extract from the *West London Observer*:—

"Among the entries in the Master's Journal appeared the notice of an interesting case, though only one of a class almost daily testing the Professional sagacity of the Medical Officer, while their successful treatment affords the most satisfactory testimony to the eminent fitness of the estimable gentleman for the position he holds in the Establishment. The subjoined report is drawn up from the entry, and the verbal statements of Mr. Johnson to the Board:—'On the 19th of August last a young man, named John Bagust, left the Infirmary, where he had been under treatment for a diseased foot since the 6th of August preceding, he being anxious to obtain employment in his trade of tallow-chandler's journeyman. As the man urgently desired to go out, his discharge was not withheld, although Dr. Spaull would most willingly have retained him on the sick list for some time longer, in order more completely to establish the cure already effected by judicious appliances. Poor Bagust has now discovered the error he then committed, and his case furnishes a striking illustration of the great danger and consequent suffering which poor people certainly entail upon themselves by growing impatient under the restraint of Medical regimen, which, irksome though it be, especially to those eager once more to gain a livelihood by honest industry, is nevertheless indispensable to the complete restoration of health. This man has just been compelled to return here, his foot at the time of his re-admission showing on the sole, between the heel and base of the toes, a frightful, sloughing ulcer some five or six inches in lateral extent, with a depth and breadth corresponding. This wound, formidable as it seems, is now much reduced, the more unfavourable symptoms having been successfully combated by the indefatigable zeal of the House-Surgeon; but the patient may thank Dr. Spaull (under Providence), and the characteristic success attending this eminent Surgeon's unwearied exercise of tact and skill, that he has escaped the ordeal of amputation. There can now be little doubt that Bagust has only to resign himself implicitly to the excellent rules enjoined upon him in order to regain the complete use of his foot.'

'We cordially concur with Mr. Johnson in the tribute here paid to the merits of Mr. Spaull. It is not of to-day that we have remarked how conscientiously that gentleman

discharges the duties of his high calling, viewing his Profession in its true light, as a sacred minister upon whose services the greatest sufferer has still the first and strongest claim. Under the careful supervision of such an officer, the Guardians can always feel secure that their trust is not betrayed, while the suffering poor may confidently reckon upon being dealt with as faithfully as though they were private patients of the Medical Superintendent."

A curious case has occurred at Pembroke. One James Parry, a butcher, was charged before the magistrates, on September 14, with having exposed for sale a quantity of beef unfit for human food. The meat was observed by a policeman, who reported it to two magistrates, and received a written order to seize it. Of the magistrates who gave the order, one was Mr. Thomas Mansel, M.R.C.S. and L.S.A., who appears from the "Medical Directory" to be District Medical Officer and Public Vaccinator for the Pembroke Union, Deputy Lieutenant and Justice of the Peace for the County of Pembroke, and a Captain of the Castlemartin Yeomanry Cavalry. The case proceeded as usual. The policeman proved the seizure. A butcher and a grazier deposed that the meat was of very dark colour, and had very little fat in it. It did not smell badly, and might have been slaughtered, but they could not swear that it had not died a natural death. Such meat, they said, should have been disposed of amongst the labourers in the vicinity; "people might eat it and it might do them no injury,—yet it was a great pity that it should be sent to market." A policeman was now sent to request the attendance of Mr. Mansel. *Potter's Electric News* of September 18 says:—

After some delay Mr. Mansel arrived, and was proceeding to the Bench, when he was informed that he was wanted in the witness-box, and the magistrate's clerk being about to administer the oath,

Mr. Mansel asked if he was to be paid for his evidence.

Mr. Roch said he understood from his reading that when a witness appeared he must give evidence.

Mr. Mansel said *he was not quite sure he would not lose a fee by being there then*, and he hoped the magistrates would not consider him uncourteous or disrespectful to them; he only wished to uphold the dignity of his Profession by demanding his fee, which he considered due to him.

Mr. Lanning read the clause touching the matter, and Mr. Roch said that any person appearing and refusing to give evidence was liable to a penalty of £5.

Mr. Mansel said he appeared there as a magistrate—and not as a witness—to take his place on the Bench.

The authority was again produced, and Mr Mansel said they wished him to appear in a different position from that in which he signed it.

The clause was then again referred to. Mr. Mansel said he interpreted it differently, and would resist it; if they levied a fine, they must distrain on his goods and chattels: he came there to take his place on the Bench. He felt greatly obliged for their courtesy and the pains they had taken to show him he was wrong, and he might be so, but he would resist it. He had frequently heard witnesses, when about to be sworn, ask "Who is to pay me?"

Mr. Lanning explained that witnesses could demand payment before giving evidence at the County Court.

After a lengthy discussion amongst the justices, Mr. Dunn, addressing Parry, told him there was not sufficient evidence to convict him, and therefore the meat must be restored to him, and he was dismissed.

On Saturday, September 21, Mr. Mansel was summoned to the Petty Sessions of the Borough of Pembroke to answer the charge of refusing to give evidence. He did not appear, but as the delivery of the summons was proved, the case was gone into in his absence:—

The policeman said that he considered his evidence very material in the case, he being a Medical man. He had previously signed an order, directing the seizure of the meat in question.

Magistrate: Did you hear Mr. Mansel give any other reason for refusing to take the oath than that his expenses were not guaranteed?

Witness: I did not, Sir.

Magistrate: Did the Bench refuse to guarantee the payment of his expenses?

Witness: They did, Sir.

Magistrate: He still refused to be sworn.

Witness: Yes, Sir, he still refused to be sworn, and the case was therefore dismissed.

By the Bench: I did not tell Mr. Mansel that he was required either as a witness, or as a magistrate.

After a short consultation, the presiding magistrate said:—The case is adjourned for a month, for the decision of the magistrates.

This case is as curious as it is annoying. Why Mr. Mansel should be compelled to appear as a Medical witness, and why some other competent Practitioner could not have been found to give evidence of the quality of the meat, we cannot see. But if a man fills the honourable office of one of Her Majesty's Justices of the Peace, we cannot but think it beneath him to hinder the course of justice, to let a delinquent escape, and the officers of justice be threatened with prosecution, even with the laudable desire to establish a good rule for the payment of Medical witnesses. We all owe certain duties to society. Every man in his station must render some unpaid services; we, as a Profession, are exempt from serving on juries, and the giving of unpaid evidence in such a case as that before us would have been less injurious than the refusal. The local papers make spiteful comments on the occurrence, and say that "Surgeons and tradesmen,"—persons not in an independent position, but "dependent for their daily bread on the poor, the outcast, and the criminal,"—are not fit to be magistrates. It were better not to have provoked such remarks. Perhaps the Celtic blood which predominates in the place explains the matter. The *Pembroke Dock and Milford Haven Gazette*, which criticises Mr. Mansel most bitterly, speaks in one paragraph of "cohersive measures," of "systimatical" almsgiving, and of the singing of a "doxologey." Perhaps the account of Mr. Mansel's offence is as distorted as the orthography of the newspaper.

Deluges of rain, short crops, and fevers are plaguing the Confederate States of America, and matters are not much better in the Federal camps, although it is said more attention is paid there to sanitary measures than is the case in the South. The *Richmond Examiner* thus describes the health of the camps:—

"The health of the camps is very bad indeed, but out of the number of cases but very few result fatally. The prevalent diseases are measles, mumps, and a mild form of typhoid fever, not dangerous, unless symptoms of pneumonia are superinduced. The lowness of the country, the great fall of rain, and the corruption of the atmosphere about Manassas, by causes which might certainly be corrected in the extreme filth of the camps, have surrounded our brave soldiers with almost every circumstance calculated to excite malarious diseases. The water, too, is bad, and its supplies scant. An artesian well is being bored within a few steps of the railroad station. Early yesterday morning, before breakfast, I took a rapid ride over the famous battle-field, about six miles from the Junction. The effect was not appetizing. Believe me, it was terrible. The field of battle stretched desolate, but not blank, before the eye. The sky above seemed dead, as it but imperfectly lighted up in the dark, drizzling rain the horrors of the scene of death. Most of the Yankee dead had been merely covered up in shallow trenches; and from these broken mounds black and putrefied limbs stretched out to the sight. Here was a head partially uncovered, with the hair dropping off at the touch of the finger—there a bunch of ghastly and putrefied fingers clenched over the shallow earth of its grave. The stench was almost intolerable, even in the morning air. An Army Surgeon, who accompanied us in our visit to the field, says that on visiting it but a few days

after the battle, he found the corpses with which it was strewn black as negroes, his first exclamation being 'Why, how many negro regiments we have killed!"

The cholera is following in the track of the famine in India. Lamentable are the deaths of young officers of promise recorded in the *Times*. Umballah, Lahore, and Gwalior are the chief seats of the pestilence.

The newspapers give a shocking account of four deaths in one room in Eagle-court, Holborn. A poor woman died soon after her confinement, and two of her children, with the infant, died the next day of scarlatina. This fever is exceedingly prevalent in the western parts of London at present.

REVIEWS.

Memoirs of Marshall Hall, M.D., F.R.S., Corresponding Member of the Institute of France, Foreign Associate of the Academy of Medicine of Paris, etc. By his Widow. 8vo. Pp. 518. London: 1861.

Dr. Marshall Hall, as painted by his widow, appears as a great and good man—great in mental gifts, good in heart. That he was possessed of high intellectual endowments, and that he used his talents with diligence, and became thus one of the most distinguished physiologists of the day, and succeeded in opening up a path of inquiry than which none has been, or promises to be, more fruitful in practical applications, it requires no biographer to announce. Dr. Marshall Hall's name is, and ever will remain, indissolubly united with the history of Medical progress. Standing thus high on the ladder of fame, he was esteemed by the learned for his learning, and looked up to as a father in Science. With the most famous amongst us, the merest fraction of their lives are manifest to the world in which they move, which they live to benefit, and which too often in its ignorance and uncharitableness misinterprets as well as undervalues. Perhaps, if it knew more of the inward life of some of its heroes, more of their motives and aspirations, if we had occasionally an Asmodeus at our elbow, a trifling revolution of opinion might now and then take place. As it is, however, the ridiculed and persecuted innovator often lives down his antagonists, while the empiric and pretender lives to be exposed. And thus it is when the real great ones of the earth have passed away, leaving behind them but the memories of the opposition they underwent, that we long to know something more about them, and to have unrolled to our contemplation the moral as well as mental characteristics which accompanied, if they were not the origin of, their success.

The widow of the subject of the biography before us is the authoress in this instance, and we must say at once that while we applaud her courage and self-sacrifice in doing what none could have done so fitly, we admire the manner in which her task has been performed. In pourtraying the character of a husband, a father, a philosopher, and a Christian gentleman, she has exhibited a delicacy of feeling, a modesty of expression, and an amount of good taste above all praise. Dr. Hall appears in these pages as a trusting Christian, carrying his innate earnestness into his spiritual as well as into mundane affairs. The evidences of this are never obtruded into notice; they are only not concealed. We commend the model to future writers of "acta sanctorum."

The general outlines of the career of this distinguished Physician are doubtless familiar to all readers of this review. How he became a student at Edinburgh, subsequently practised for a time at Nottingham, and at length removed to London in the year 1826. It appears that he was not taught classics at school, but taught himself Latin after leaving school, at the age of fourteen, and so perfectly and thoroughly did he accomplish the work, that not only did he compose his own thesis at his graduation in Edinburgh, but also those of some of his friends, and on presenting himself at the London College of Physicians, was complimented upon his Latin composition by Sir Henry Halford. From the time of leaving school to the very last, it was his habit to throw the whole energies of his ever-active mind into the accomplishment of whatever appeared to him a desirable object of pursuit. He established himself in Nottingham at the age of twenty-seven, and speedily succeeded in establishing an extensive practice. Several anecdotes are related tending to show his utter disregard and carelessness about money. Although never accepting less than his full fees as a Physician, he did not trouble himself much about them afterwards, "He always valued fame far more than money, appreciating the latter chiefly as an evidence of having attained the former." When he suddenly left Nottingham, his brother-in-law found, on settling his affairs for him there, that he had left a number of guineas loose and unlocked in a dressing-room drawer. When he first came in London, Mr. and Mrs. Burnside resided in the same house with him. On one occasion a lady gave him the fare intended for a hackney coachman by mistake for his fee, and on subsequently apologising for her carelessness, the Doctor insisted that she must be mistaken. On this being mentioned to Mrs. Burnside, she replied, "That it was quite possible, for unless the fee were placed in his hand he never looked for it. So constantly did this happen, that as soon as he left his consulting-room, I used to go and collect the fees, locking them up in a drawer."—P. 69. In the first year of his residence in London, his fees amounted to £800, and after seven years to £2200 per annum. When he had been twenty-three years in London, his professional income was £4000 a-year.

Much of the volume is necessarily occupied by the history of his labours in the establishment of his new doctrine of the spinal system, of the opposition he met with, the refusal of the Royal Society to give a place to his contributions in their Transactions, and of the good temper as well as patient courage with which he bore up against the stream which from so powerful a quarter had set in against him. "Such was the importance which Marshall Hall attached to his discovery, and so great was his enthusiasm in the pursuit of the investigation, that he had even proposed to withdraw from practice, and to sacrifice five years of his life and professional career, in order to devote himself to the subject without interruption."—P. 89. His widow writes "One thing in remarkable; in the midst of his indignation at calumnies, and his annoyance from constant opposition, misrepresentation, and ingratitude, his temper was never affected. This I can most unhesitatingly affirm, and it is a fact which forcibly struck our most intimate friends. Some men would have been soured and rendered morose by so long a series of provocations; but his constant kindness and amiability towards all around him were undisturbed by these trials. No petulance, no gloominess, manifested that he had been annoyed and even pained. The only sign which betokened to me that a fresh attack had been made upon him was, a little thoughtfulness and abstraction, and an unusual devotion to his writing. For this he would awake in the night, light his candle, and write in bed, with evident anxiety and wonderful rapidity. When he had completed his reply and not till then, he showed me the attack and his defence together."—P. 101. This patient temper is again particularly noticed in a portion of the biography specially devoted to Dr. Hall's domestic character. Interruptions in the midst of his writing never ruffled him. "Conversation did not interrupt him, provided he was not required to take part in it. He loved the domestic circle, and even when his mother and others of the family were with me, he would bring his writing into the drawing-room, where we were all assembled in the evening."—P. 219.

Mrs. Hall says "I am often asked '*When* did Dr. Marshall Hall find the *time* to write his works?' I will endeavour to show, for the benefit of the young Student, by what means Marshall Hall was enabled to accomplish so vast an amount of labour. His mind was generally occupied with important subjects, for he did not *think idly*. He used scraps of time, which most people throw away, or bestow upon trivial objects. His works *were principally written in his carriage* as he drove from one patient to another. In recording his experiments, he noted them down *at the time*. They were performed in the evening after a laborious day's practice, but he never retired to rest till he had accurately written down the results."—P. 218. He wrote rapidly, and was in the habit of sending the rough copy to the printer, so that sometimes it was not very legible. On one occasion the printer declared that he could not undertake to print from copy so

illegible. On this and other occasions Mrs. Hall undertook its transcription. Much time was saved by a resolution which he and his wife came to on their marriage : "We agreed that we would not visit in the ordinary acceptation of the word, and we adhered to our resolution. General invitations were declined, and not reciprocated, which of course soon narrowed our circle of acquaintance, though it by no means precluded much delightful society among friends who, like ourselves, enjoyed quiet, intellectual, unceremonious intercourse. Some of our friends thought this exclusive life very unadvisable. One, my husband's senior, gravely represented to him that it would be a serious disadvantage, in preventing the extension of his practice and counselled the cultivation of a large circle of acquaintance as a politic measure. His advice was not followed, which we had never reason to regret."—P. 226.

And yet no one delighted more in social friendly intercourse, and none could exercise more warm-hearted and genuine hospitality. Mrs. Hall relates, that so far was he from the slightest love of anything like ostentation, that on the very day of their removal to Grosvenor-street he insisted upon detaining to dinner a German Physician, a perfect stranger, but introduced by the Chevalier Bunsen. "If a country friend were out of health he would say, 'Come and stay with us, and I will see what I can do for you.' Genuine benevolence actuated him in everything. The consideration with him was not 'What can they do for me? but, what can I do for them?'"—P. 228. He was eminently of a happy disposition. All who knew him well were much impressed with this feature of his character. Of the absorbing affection he lavished upon his family sufficient proofs are given ; but their transference to these pages would be out of place.

There is one professional habit of Dr. Marshall Hall we are glad to see mentioned in this volume, and to which we specially call attention. It was that of great precision in giving his directions in the sick room, and even of writing down his instructions when the case was in any way important. Mr. Marshall Hall Higginbottom says :—"After examining the case, and having ascertained who was the responsible nurse, he would impress upon that individual the necessity of seeing that all his orders were fully and punctually carried out. His directions were plain, and more than once repeated ; he would say, 'Now, recollect, you have so many things to attend to,' enumerating them one by one on his fingers, and getting the nurse to go over them in the same manner and order. Upon his next visit he would inquire if all his directions had been attended to, again making the nurse repeat them. If anything, however trivial, had been omitted, a very unusual occurrence, when the duties had been so fully impressed on the memory, he would express himself as being much dissatisfied, and insisted upon the necessity of being implicitly obeyed for the future. In severe cases he would order the hours at which medicines were given, and other means used, to be committed to paper, and shown to him at every call."—P. 135.

In February, 1853, the state of Dr. Marshall Hall's health led to a relinquishment of his London practice, and he started on a tour in America. His progress throughout the States and Canada was one prolonged ovation. To this we need not refer here, the reports of his reception in every town and city that he visited are even now fresh in the recollection of our readers. But amidst all he writes to Dr. R. Reynolds, "The chief thing which has occupied me has been the all-absorbing *Slave* question. I could devote the rest of my life to effect emancipation, if possible."—Page 294. Still, he regarded "abolition" as far from being a boon to the slave, beside being unjust toward the slave-owner. He thought much upon this subject, and proposed a scheme for self-emancipation, which he embodied in a work on "The Twofold Slavery of the United States," published in 1854. It consisted mainly in the repeal of the penal laws against Negro education, and the substitution of fair *task work* for *daily* tasks, and when this was done that the privilege of *over work* should be granted to the slave, so that in time out of his own savings he might be able to purchase his freedom, a fair minimum value being placed upon him.

The simple and touching account of the last days of this renowned Physiologist and Physician is full of interest. Calm, patient, self-possessed in the prospect of a death by starvation, which his Medical knowledge assured him of, he trustfully awaited his end. "Unselfish to the end, his last words were devoted to promoting the good of others." Mrs. Hall writes, "Thus peacefully did this remarkable man, this servant of Christ, fall asleep in Jesus. With his great mind, he was as a little child in his pure, simple, fervent faith. A smile rested on his countenance after death, and the features were entirely free from alteration, retaining the happy expression which marked them during life. The calmness and peacefulness of his departure left a profound impression upon all who witnessed it."—P. 420.

We repeat that in our estimation all thanks are due to Mrs. Hall for perpetuating to us and our successors these memoirs of one of the most distinguished and illustrious members of our Profession. We may not entirely agree with the opinion of the widow as to the "temper" displayed by Dr. Hall in some of the scientific discussions in which he took part; indeed, we think a useful lesson might have been impressed on the rising generation by a candid confession of faults of temper which were only too evident, and which tended to retard the acceptation of the great truths he announced and defended; but this reservation does not at all detract from our recommendation of the work as one well worthy of perusal and study by all classes of our Profession.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

Paris, September 15.

ARSENIC IN AGUE.

Although quinine is much more expensive than arsenic, and the therapeutical experience made with the latter remedy in cases of ague has on the whole been very satisfactory, the use of arsenic in this affection is still very rare. Many Medical men are afraid of administering so powerful a medicine, and it is true that the mode of using it has not generally been so judicious as it might be. M. Sistach, Physician to the Military Hospital of Vincennes, has recently made a number of trials with arsenic in ague, and has come to the following results concerning the value of this treatment :—

Arsenic is a powerful febrifuge in recent cases as well as in such of long standing, and which are continually kept up by a paludal cachexy. It acts more rapidly in tertian than in quotidian fever, and it has an evident influence upon tumours of the spleen. Its effect is, however, dependent upon the pharmaceutical quality of the preparation, and upon the dose of the remedy. To be innocuous, the entire dose of the arsenical preparation to be given must be divided in a peculiar manner; due regard must be had to the constitution of the patient, and the dose must be diminished as soon as the paroxysm is suppressed.

M. Sistach has treated 150 cases of ague with arsenic, of which 53 were cases of quotidian, 94 of tertian, and 3 of double tertian fever; 50 of them were quite recent, 100 of long standing. Some of the patients had made the late campaign in Italy. The results of the treatment were as follows :—86 patients had no further paroxysm after the first dose, 73 had one, 25 two, and 6 three more paroxysms. There were 22 relapses, of which 9 belonged to the tertian, and 13 to the quotidian type, 8 being of recent date, and 14 of long standing.

As to the form in which arsenic should be administered, M. Sistach recommends to use it in solution, because thereby the absorption and division is facilitated, and he prefers M. Boudin's solution to all others. This is prepared in the following manner :—One gramme (about 16 grains) of white arsenic is boiled with one litre of distilled water in a porcelain saucepan until the arsenic is entirely dissolved; the solution is then allowed to cool, is percolated, and the loss of water by evaporation is compensated by a fresh addition of distilled water to it; the whole is then well mixed with one litre of white wine. This liquor arsenicalis Boudini contains five centigrammes of arsenious acid in 100 grammes of fluid (1 part of arsenic to 2000 parts of liquid). Of this preparation, 60 grammes (2 ounces) are at first given per diem, and as soon as the paroxysm is suppressed, only 30 or 40 grammes should be given per diem, and the treatment be concluded with 20 grammes per diem. These total doses have to be divided into

4 parts, the first of which is taken at 6 a.m., the second at 8 a.m., the third at 2 p.m., and the last at 8 p.m. If thus administered, the remedy causes neither vomiting, colics, nor diarrhœa, nor does it exert any influence on the pulse and the temperature of the body. M. Sistach has observed that, as long as the fever was not quite gone, the remedy agrees very well with the patient at any hour, provided the dose be sufficiently small, and the appetite may even increase under its influence; but if the fever is suppressed, the smallest dose will disturb the appetite if taken immediately before a meal, and will excite vomiting if taken directly after a meal. In every case the treatment was commenced with an emetic if the stomach was out of order, and if, when the treatment had been concluded, the appetite did not return, the same was done, after which a generous diet could be allowed.

ON THE NERVOUS DISEASES OF THE RESPIRATORY ORGANS.

M. Mandl's lectures on the diseases of the respiratory organs, delivered at the Ecole Pratique this summer, contained several points of interest, of which I shall give you a short summary. An increase, or diminution, or a change of sensibility, which is often observed in the respiratory organs, is of no great importance, as it is not caused by structural changes; while those symptoms which are dependent upon disturbances of the function of motor nerves are of more consequence. Hysterical paralysis of the spinal accessory nerve causes certain changes in the voice and even aphonia, as the lower vocal chords can no longer approach each other; an affection which may, by the laryngoscopic examination, be easily distinguished from that form of aphonia in which the vocal chords are no longer able to separate from each other, and which is caused by a paralytic state of the recurrent nerve, without further structural changes; and is often observed in consumptive patients, in consequence of the nerve being compressed by tubercles. In the former case the breathing is easy, while in the latter it is impeded. These clinical observations entirely agree with the results of the physiological researches of M. Claude Bernard. M. Mandl has made the experience that, in consumptive patients, this change of voice may exist from the very commencement of the disease if the right lung is attacked; while the left lung may be fearfully diseased, and still the voice may remain normal, unless ulcers should come on in the vocal chords. M. Mandl is now preparing for publication a paper on the anatomical relations of the parts by which these phenomena are caused.

There occur other disturbances in the motor sphere, viz., the convulsive cough in its various forms, from the simple hysterical cough to that similar to the bark of a dog; nervous asthma, if the vagus is affected, and angina pectoris if the phrenic nerve suffers. All these diseases have the characteristic feature of having intervals of perfect repose and well-being, which are followed by unaccountable paroxysms, coming on like lightning without motive or regularity; and that they are not dependent upon structural changes.

These nervous diseases are especially frequent in hysterical women and in men who suffer from loss of sperma. A short, dry cough; oppression on the chest, difficulty of breathing, great irritability, disturbances of the digestion and circulation, may often lead the inexperienced Practitioner to believe in the existence of tuberculosis. These affections are not to be confounded with such as are of an inflammatory nature, especially with those which come on by a simple congestion, or are subsequent to previous acute inflammation. Such congestions may occur in the upper part of the air-passages, as chronic laryngitis caused by sudden changes of temperature, by smoking, fatigue, immoderate or irrational use of the voice, or by a faulty way of breathing. With this disease an inflammation of the glands of the posterior wall of the pharynx is often associated. Sometimes the uvula is swelled and the tonsils are hypertrophoid; in this case we find the phenomena, which are generally shown by the auscultation and percussion of the upper part of the right side of the chest, so peculiarly modified, that many Medical men, taking also into account the morbid sensations of the patient, diagnose incipient tuberculosis, and under this impression they often send such patients to sulphureous thermal baths, which, however, do not afford much benefit. The repose of the voice for several months, exercise in open and good air, freedom from care, and the amusements found in the watering places, are the causes of the improvement if such sets in; and only a local treatment can have a really curative effect. The chief feature of this must be the application of caustic and astringent remedies. Dr. Mandl recommends the following solution to be applied by means of a small sponge to the posterior wall of the pharynx:—℞ Iod. gr. xij., Potass iodidi ʒij., Aq. destill. ʒijss.

In dry bronchitis, where there is no mucous râle, little or no expectoration and a very violent dry cough, Dr. Mandl recommends fumigations of creosote (gr. xij.) acetic acid ʒij, Aq. comm, ʒijss., of which one or two teaspoonfuls are mixed with two or three tablespoonfuls of water, and are applied to the larynx by means of Dr. Mandl's apparatus for fumigations.

SWITZERLAND.

Zurich, September 14.

ON ANIMAL ELECTRICITY.

When M. Dubois Reymond, of Berlin, first published his important researches upon animal electricity, in 1848, they were unconditionally accepted by the Profession; and it was little short of heresy to doubt any of the learned physiologist's propositions, founded, as they were, upon a very large number of experiments performed with the greatest care, and under very varied conditions. But if there is one lesson taught by the history of physiology, it is this: that every succeeding experimenter demolishes the views put forward by his predecessor, and is again demolished by some successor more clever, more industrious, more fortunate, or furnished with nicer contrivances for experimenting than were in existence before. Another instance of this rule I shall relate to you to-day.

Professor Moleschott, of whose researches on the influence of the vagus and the sympathetic nerve upon the heart's action, I gave you an account in a former letter, has quite recently made a series of experiments on the changes induced in the current proper of the nerves, as soon as the nerve enters that state which enables it to cause motion, sensation, and secretion. The view first propounded by M. Dubois Reymond, and accepted by all subsequent writers on the subject, was the following:—The nerves consist of an innumerable number of electrical molecules, which are differently arranged according to the different states of the nerves. The electric currents of the nerves show, in some instances, so sudden variations of intensity and of direction, that they cannot be accounted for in any other way than by assuming corresponding changes of position in infinitely small centres of action. When the living nerve is at rest, M. Dubois Reymond supposed these molecules to be turned towards each other with equal extremities, so that two of them formed, as it were, only one molecule, possessed of one positive zone and two negative poles. This he called the peripolar arrangement; and showed that, if this arrangement existed, the magnetised needle was deflected by the nervous current. If, however, motion, sensation, or secretion was caused (whatever the means may be by which the nerve was excited), the nervous current suffered a great and sudden diminution, evidenced by the needle, which had been deflected during the peripolar arrangement, immediately returning more or less towards its previous position of equilibrium. This was called by Dubois Reymond, the *negative variation* of the current, and was one of his greatest discoveries. Professor Moleschott however, has found, that in many instances, where, according to this theory, a negative variation ought to be caused, a positive variation of the nervous current is in fact, produced, and that therefore this law of Dubois Reymond is no longer tenable

The contrivances now used in experiments of this kind are no longer those originally employed by Dubois Reymond, and with which your readers are no doubt acquainted, a full account of them having been given in Dr. Bence Jones's "Animal Electricity," and Dr. Althaus's treatise on "Medical Electricity." But after a time it became evident, that even if every care was taken to make the platinum plates with which the extremities of the multiplier were connected, as homogenous as possible, still they, and the salt-water moistening the cushions of blotting-paper on which the nerves were laid, produced polarisation or secondary currents, which

disturbed the experiment, and M. Matteucci, therefore, in order to obviate this inconvenience, proposed to employ, instead of porcelain vessels, such of amalgamated zinc; and plates of amalgamated zinc, instead of platinum plates; and a concentrated solution of sulphate of zinc instead of the salt-water. This latter contrivance is no doubt far superior to that originally used by Dubois Reymond, and has, therefore, been generally accepted by experimentalists. The galvanic cell used in M. Moleschott's researches was a Daniell's battery, charged with one part of sulphuric acid and nine parts of water. The experiments were made on the sciatic nerve of rana temporaria, the peripheric extremity of which was placed upon the cushions, and also on the forearm of a woman which had just been amputated by Professor Billroth, on account of severe injury. As the physiologica laboratorium of this University is in immediate communication with the Hospital, the amputated limb was not exposed to the open air, but was after having been removed immediately placed at the disposal of M. Moleschott, who used the peripheric end of the ulnar nerve for his experiments, and the results obtained on the human nerve were quite identical with those obtained on the nerve of a frog.

In thus experimenting, Professor Moleschott found that a positive variation of the current proper of the nerve is caused if the nerve enters its active state, on being excited by an induced current, provided that a continuous galvanic current, which on passing through the nerve excites in it the electrotonic state (that is, either an increase or a diminution of the intensity of the nervous current; positive and negative phase of the nerve) has caused a certain augmentation of the nervous current during the electrotonic state. The greater this augmentation is in either of these two phases of the nerve, owing to the passage of a continuous galvanic current, the more certainly we may cause a positive variation of the current on exciting the nerve by induction currents. It is only necessary that one phase of the electrotonic state, viz., either the positive or the negative one should be previously brought about in the nerve acted upon, in order to cause a positive variation of the current; but the positive phase seems to be more efficient for this purpose than the negative one. If the multiplier does not indicate an increase in the electrotonic state of a nerve, a positive variation is never observed; but sometimes a negative one. If strong inductive currents are employed for exciting the nerve, a positive variation may be brought about, if the nerve is quite fresh; and if we observe this variation, we may be sure that the nerve is very nearly in its normal condition. Such nerves as have lost their excitability and vitality, never show a positive variation, while a negative variation may still be caused in them.

At the same time that M. Moleschott has thus destroyed one part of the edifice erected with such care by M. Dubois Reymond, this has been also attacked from another quarter, and as it seems with equal success; viz., by Professor Budge, of Greifswald. This gentleman has quite recently undertaken a series of experiments, which have given the result that Dubois Reymond's law of the current proper of the muscles is also untenable. M. Dubois Reymond's theory was, that no current existed if two points of the muscle were examined, which were at an equal distance from the equator; that is, the line situated in the middle between the two extremities of the muscle. M. Budge has, however, found in a large number of experiments that, contrary to Dubois' assertion, very considerable deflections of the magnetised needle may be observed under such circumstances. Dubois has also laid down that no current is perceived between two artificial transverse sections of the muscles, if the two points connected by the conducting cussions are at an equal distance from the centre of the muscle. This is also incorrect; as M. Budge has found, that if the gastrocnemius is transversely cut through as its upper and lower extremity, and any two points of the transverse section are connected with the cushions, a considerable deflection takes place. According to Dubois, the strongest current in the muscle is that between the natural longitudinal section and the artificial transverse section; on this proposition M. Budge remarks, that it is correct, provided that the artificial transverse section be made at the lower end of the gastrocnemius; but if it be made at the upper end of this muscle, in eight cases out of ten the reverse is observed; and as to Dubois Reymond's theory on the parelectronomic layer which should exist on the surface of the fresh muscle, and which should be removed on touching the muscle with salt water, or albumen, or alcohol, or acids, or alkalics, M. Budge asserts that this layer is a myth, and does not exist at all.

There are according to M. Budge, two currents in the muscle; one of them is caused by a dissimilarity between the two extremities of the muscles, and the other is the current described by Dubois as existing between the artificial transverse section and the natural longitudinal section; that is, one is a natural, and the other is an artificial current; the former travelling from above downwards, the latter from below upwards The one of these currents either neutralises or diminishes the other; the rule being that the natural current is the stronger of the two; and therefore, at the upper extremity of the muscle, the transverse section is positive to the longitudinal section, contrary to the law propounded by Dubois, that each point of the longitudinal section, whether natural or artificial, should be positive in respect to the transverse section, whether natural or artificial.

Finally, M. Budge has demolished the proposition of Dubois, that the tendons were to be considered as natural transverse sections, and that there was a current between the longitudinal section of the muscle and the tendon, the former being positive in respect to the latter. According to M. Budge, just the reverse is the case if we experiment upon the upper extremity of the muscle, the current travelling from the tendon to the longitudinal section, while it is only at the lower extremity of the muscle that the current travels from the longitudinal section towards the tendon. It is therefore evident that the polar contrast of the two extremities of the muscle is the cause of these phenomena, and that the tendons cannot, *per se*, be considered as natural transverse sections. The reply of Dubois to these attacks on his system, which was by not a few of the fanatical adherents of this distinguished physiologist, believed to be perfect and unassailable, is eagerly expected.

MANCHESTER.

(*From our Special Correspondent.*)

(Concluded from page 335.)

September 27.

In this concluding notice I shall have to record the chief events occurring at the Association during the three last days of meeting. On Monday, September 9, the Astronomer Royal's lecture on the Solar Eclipse of 1860, called together all the members, and created an universal interest. The voice of the Astronomer Royal is very weak, and does not "carry," so that he was not heard throughout the whole of the large room; but I, who was fortunate enough to get a seat near to the platform, was enabled to catch every word; and I must say, that anything more clear in the way of description I have rarely listened to. The lecturer's account of his journey to Spain was both an amusing and instructive narrative, and the evidence he brought forward to the effect that the red prominences, observed during a total eclipse, belong in reality to the sun, was logical and almost demonstrative. Notwithstanding these excellences, there were certain blemishes in the lecture which greatly reduced the pleasure otherwise derivable from it Two or three times the lecturer had occasion to refer to the observations of persons whose statements of what they had seen during an eclipse did not accord with his views. Of these persons and their labours he spoke with a cynical, dogmatical, and acidified expression, which at least once, to our taste, amounted nearly to coarseness. As the persons referred to, moreover, were not specially named, the unpleasant effect was heightened, inasmuch as the observations had thus given to them a wideness of range which might have included any number of persons, excepting the Astronomer Royal himself and those under his immediate command.

Taking everything into consideration, I doubt whether these popular lectures are efforts to be encouraged at the meetings of the British Association. They do not seem adapted to the occasion. To fill the office of lecturer on such nights, and to such an audience, a man must be found who blends so many and such diversified qualities, that we doubt if in science there is such a man to be found. In speaking, he should combine the ease of Gladstone with the force of Bright;

in knowledge he should rank with Humboldt, and in sweetness of expression with Faraday. People in these days are fastidious as to what they hear, and not less so as to the way they are made to hear. However large an audience, an exordium must not be shouted as if the listeners were all deaf; neither, on the other hand, can an exordium, or aught else, be received passably with the back rows constantly sending out stentorian requests of "speak up." I make these remarks because Science is rather dishonoured when her leading ministers, however able they are in their own private circles, fail to present her in first-class art on those rare occasions, when she is allowed to be publicly exhibited. If the same audiences that were collected at Manchester to hear our lecturers had come together to hear any of the masters in music, the drama, or politics, and had heard what had to be done conducted in the same style, there would have been one universal note (we will use the mildest possible word) of criticism. As it was, the audiences, less able to judge critically, were moderately satisfied; but such satisfaction, in the present rapid state of scientific advancement, cannot be expected to last for ever.

At the close of the Lecture on the Eclipse some beautiful pictures were thrown on a screen under the superintendence of Mr. Warren De la Rue. In this he was ably assisted by Mr. Ladd, the well-known philosophical instrument maker, of Beak-street, who also at Dr. Miller's lecture exhibited the experiments on spectrum analysis with remarkable readiness and success.

The last of the great public meetings in the evening, was held on Tuesday, September 10, when the Field Naturalists' Society gave a brilliant *conversazione* at the Free Trade Hall. In the course of the evening Dr. Lankester delivered one of his spirited speeches, at the conclusion of which he vindicated the alliance of science and religion, and wigged the preachers who preached an antagonism.

I must go a little out of my course to supply a reference to a paper read on the previous day in Section F (Economic Science) by Dr. William Farr, "On the Health of the English Army." With his usual precision, Dr. Farr illustrated that a manifest diminution had taken place in the mortality and sickness of the army, and that the great causes of the excess of deaths was entirely under control. He seized also the opportunity to pass an eloquent eulogium on the late Lord Herbert.

On Monday morning in the Physiological Sub-section, four papers were read and underwent discussion.

Mr. Garner read a paper "On the Brain in Man and Animals." His labours were directed to the study of the functions of the different parts of the brain. He traced the developments of the different portions of the cerebral structures and of the convolutions from the smooth brains of the rodentia to the deeply-convoluted brain of man. He disputed the axiom of Gall, that the cerebellum is the exclusive organ for the government of the amative faculties, and considered it as the regulator and distributor of the motive force derived from the cerebrum. In the latter part of his essay, Mr. Garner compared the male and female cerebral developments, and urged, against the doctrine of the phrenologists, that some men of eminence have had small heads.

A paper by Dr. Mouatt, next read, had reference to the "Prison Diet of India." His observations had special bearing on the diets of prisons in the gaols under his superintendence in Lower Bengal. He gave a historical sketch of the various dietaries in use in the province, and passed to the consideration of the sanitary influence of the present system. The dietetic value of the chief articles used as food was arranged in Bengal on the analyses of Dr. Forbes Watson (whose labours we have so often quoted in our pages), and four scales of diet were recommended:—1. For Bengalese and Assamese. 2. For the natives of Behar, the North-western Provinces, and the Punjaub. 3. For Coles, Santals, Garrows, and Hill-men generally. 4. For Mughs and Chinamen. The latter are fond of dogs and cats for food, and cannot do without animal diet. Dr. Mouatt did not support the idea of the occurrence of such diseases as dysentery, phthisis, scurvy, and the like, being dependent on, or connected with, particular regulations in respect of dietaries.

The third paper or rather a series of papers, from the pen of Professor Hyrtl, were read. The papers were entitled respectively "On Nerves Without End," "On the Pneumatic Processes of the Occipital Bone," and "On Portions of Lungs without Blood-vessels." It had been well if some friend had suggested to the learned Professor better titles than those attached to the first two communications; for although the terms convey a correct meaning to the professed physiologist, they seemed most embarrassing to general hearers. The papers were read by Dr. Wright.

The fourth communication was by Professor Rolleston, "On some Points in the Anatomy of the Insectivora." His descriptions were mainly confined to the mole, the shrew, and the hedgehog, and had reference to the circulatory, the respiratory, and the nervous systems of these animals. Towards the close of his paper Dr. Rolleston brought in, almost in an incidental way, but with great effect, the facts relating to the memorable quarrel still progressing on the question of the *Hippocampus minor*, and gave it, out and out, that the higher apes have such a knuckle of brain stuff, in which particular they resemble, of course, their more intellectual brethren. In the debate which followed, Professor Williamson supported Mr. Rolleston, and expressed, I believe, an opinion unanimously felt in saying that the paper was a model of patient, unobtrusive research.

In the Chemical Section, Dr. Macadam made a communication "On the Proportion of Arsenic Present in Paper-Hangings." He asserted an opinion in favour of the view that arsenical papers were injurious to health; he believed that in rooms, the walls of which were charged with arsenic, the poison, during times when the air was moist, might be carried off in combination with water, and so be respired.

In Section A (Mathematical and Physical) a paper was read by Sir David Brewster, which must not be passed unmentioned. The paper was entitled, "Condensation of Impressions made upon the Retina," and was illustrated by a diagram. I fear that it would be impossible to convey an intelligible account of this paper in a mere abstract.

There was one other topic discussed in the sections on Monday, to which I wish there was time to refer, for although it is scarcely to be called a scientific topic, it affects our Profession in its material prospects most convincingly. This question was the income tax. Suffice it to say, that those who feel this tax to press unusually hard on fluctuating professional incomes gave full and logical expression to their opinions.

The papers read on Tuesday, (the last day with most of the Sections) were of peculiar value to Medicine. In the Zoological Section Dr. Jessen, in a paper "On the Absorbing Powers in the Roots of Plants," took occasion to touch on the so-called "Vital Force" which he designated, almost as one of our modern physiologists has designated it, "a convenient phrase for hiding that which one cannot or has not enquired into." He then entered into an elaborate description of the absorption of their alimentary principles by the roots of plants, giving a physical reading of the phenomena. In this reading the liquid diffusion theory of Dr. Graham formed an all-important element. A brisk discussion ensued in which Dr. Lankester took part, and made an attempt to divide the theological from the scientific part of the subject.

In Sub-Section D (Physiology), Dr. Cleland opened the proceedings with a long and laboured essay "On a Method of Craniometry." He exhibited an ingenious instrument which he had constructed for taking measurements of the relations of any series of points in the circumference of the cranium. He next proceeded to demonstrate, that although there were great differences between savage and cultivated races, in the proportional breadth of the cranium and face, yet, when the proportions of the front, middle, and back parts of the head were examined, there was seen to be no characteristic differences of size and shape between the heads of the European and the African. He passed, also, to the relative differences and analogies between the human head and the heads of various inferior animals. Dr. Cleland's paper was illustrated by a series of beautiful drawings and calculations.

Dr. Edward Smith read a paper "On the Influence of the Seasons of the Year on the Human Body." His observations were based on the long and laborious series of experiments made on himself. One part of his inquiries had reference to the respiratory processes, the other to the elimination of nitrogen. By estimating the amount of carbonic acid gas expired, it was shown that there is an uniform amount of vital action during the cold season. In March and April there is an increase; at the beginning of June there is a

further decline, and this decline continues until September, when it begins to rise again until the point is reached from which he had set out. The evolutions of nitrogen are the reverse of those which had been given in respect to carbonic acid. In regard to disease, all the epidemics occur, as a general rule, at those periods when the lowest vitality is represented.

Dr. Richardson, on the conclusion of Dr. Smith's paper, gave an account of his recent researches, "On the Artificial Production of Cataract," and placed before the Section frogs presenting cataract in various stages of development. The labours of the author in this curious and practical inquiry have been so often referred to in our columns, that our readers are familiar with them; but to the attendants of the Sub-Section they were novel, and created considerable interest. In the closing part of his paper the author showed how the production of cataract was explainable on the physical principle of osmosis, and took occasion to illustrate the new views of Professor Graham in elucidation of his argument. In reply to several matters noticed in the debate on his paper, Dr. Richardson said, "We have been accused of having no one fact in physic or in physiology so sure, that a prediction in respect to any phenomen can be advanced upon it. Now, however, that can no longer be said, for let any one performing an experiment on a frog for the production of cataract give me the whole of the details connected with the performance of the experiment, and I could predict the period when the vision of the animal would be totally obscured, with nearly the same certainty as the Astronomer Royal could predict an eclipse of the sun from data furnished to him by his science." This observation was received by the audience with marked enthusiasm.

Dr. Morrell followed with an essay, "On the Physical and Physiological Processes involved in Sensation." He traced all sensation to one general and common cause. Theories without number had been formed for the purpose of bridging over the gulf which lies between matter and consciousness, between the objects of sense around us, and the fact of sensation within us. Looking to the external physical parts of the process, we must consider first of all, what it is that the nerves convey from the world without to the mind within. From the question thus put, the author, arguing from analogy, reasoned that man possesses a nervous system pervaded by a force which can pass freely from every point in the human system to the centre, and from the centre to every point in the circumference; that he is placed in a universe palpitating with countless millions of vibrations; that the material universe makes itself known to him through the medium of motion, and communicates wholly with the consciousness through motion as a link of connexion.

In the discussion which followed, Professor Bain, Dr. Camps, Dr. Richardson, and others, took part. Professor Bain criticised the argument as introducing too generalising a spirit into a subject beset with difficulties. Dr. Richardson explained that in so far as experiment safely led him, he agreed to a large extent with the author. He had, indeed, during the last months devoted a considerable portion of a course of Lectures (the Lettsomian) to an attempted elucidation of what was virtually a similar argument. Dr. Richardson believed that the force which charged the nervous system was derived from the blood, was communicated to the nerve fibres at every point, and was identical with electricity in its static condition. On the disturbance of the equilibrium of the pervading force, sensation was the resultant effect. Dr. Morrell briefly replied, and after the reading of two short papers by Dr. Rolleston, the business of the Sub-section for 1861 was declared completed.

In Section A, Sir David Brewster gave another paper on the Retina, and in Section E, Dr. Bakewell read an Essay "On the Influence of Density of Population on the Fecundity of Marriages in England."

LIST OF PAPERS AND ADDRESSES COMMUNICATED BY MEMBERS OF THE MEDICAL PROFESSION.

In bringing to a close this account of the Manchester meeting, I cannot do better for a Medical journal than indicate the part borne in the proceedings by the Medical Profession. I have calculated that the sum of papers, addresses, lectures, and casual communications, laid before the Association amounted in round numbers to 263. I am open to correction on this point, but am not very far wide of the mark on either side. The portion of these labours delivered through the Medical body was as follows. The names of the contributors are taken in alphabetical order:—

Dr. Andrews, M.D., F.R.S.—1. On the Effects of Great Pressure Combined with Cold on the Six Non-Condensible Gases.

Dr. Bakewell, M.D.—2. On the Influence of Density of Population on the Fecundity of Marriages in England.

Dr. Lionel Beale, F.R.S.—3. On the Structure and Growth of the Elementary Parts (cells) of Living Beings.

Dr. Cleland, M.D.—4. On a Method of Craniometry.

Dr. John Davy, M.D., F.R.S.—5. On the Action of Lime on Animal Matter. 6. On the Blood of the Common Earthworm. 7. On Sudden Change of Colour of Human Hair.

Dr. Farr, M.D., F.R.S.—8. On the Health of the English Army.

Dr. Gibb, M.A., M.D.—9. On Arrest of Puparial Metamorphosis of Vanessa Antiopa.

R. Garner, Esq.—10. On the Brain in Man and Animals.

Dr. Hector, M.D, F.R.S.—11. On the Coal Deposits of the Saskatchewan Prairies. 12. On Changes in the Physical Geography of British North America. 13. On the Settlement of the Central Part of North America.

Professor Hyrtl.—14. On Nerves without End. 15. On the Pneumatic Process of the Occipital Bone. 16. On Portions of Lungs without Blood-vessels.

Dr. Kidd, M.D.—17. On Chloroform Accidents.

Dr. Lankester, M.D., F.R.S.—18. Address on Field Natural History.

Dr. J. H. Lloyd, M.D.—19. On Purifying Towns from Sewage by means of Dry Cloacæ.

Dr. W. A. Miller, M.D., F.R.S.—20. Address as President of Chemical Section. 21. Photographic Spectra of the Electric Light. 22. Lecture on Spectrum Analysis.

W. R. Milner, Esq.—Report on Prison Dietary and Discipline, conjointly with Dr. E. Smith.

Dr. Mouatt, M.D.—23. On Prison Diet in India.

Dr. Moffatt, M.D.—24. On Atmospheric Ozone. 25. On Sulphuretted Hydrogen as a Product of Putrefaction.

Professor H. Muller.—26. On the Existence and Arrangement of the Fovea Centralis Retinæ in Men and Animals.

Professor R. Owen, D.C.L., F.R.S.—27. On the Construction of the Vertebræ of the Mole. 28. On Some Objects of Natural History from the Collection of M. Du Chaillu. 29. On a Dinosaurian Reptile from the Lower Lias of Charmouth. 30. On the Osteology or Dentition of the Natives of the Andaman Islands. 31. On the Remains of a Plesiosaurian Reptile from the Oolitic Formation of the Middle Island, New Zealand.

Professor Remak, M.D.—32. On the Influence of the Sympathetic Nerve on Voluntary Muscles.

Dr. Richardson, M.A., M.D.—33. On Resuscitation. 34. On the Artificial Production of Cataract.

Dr. W. Roberts, M.D.—35. On the Solvent Powers of Weak and Strong Solutions of Alkaline Carbonates on Uric Acid Calculi.

Dr. G. Robinson, M.D.—36. On the Connexion between the Functions of Respiration and Digestion.

Professor Rolleston, M.D.—37. On the Anatomy of the Insectivora. 38. On the Homologies of the Lobes of the Liver in Mammalia.

Dr. Edward Smith, M.D., F.R.S.—39. On Prison Dietary and Discipline. 40. On the Influence of the Seasons on the Human Body.

J. Toynbee, Esq., F.R.S.—41. On the Action of the Eustachian Tube in Man.

Dr. James Turnbull, M.D.—42. On the Physiological and Medicinal Properties of Sulphate of Aniline.

Without assuming too much for ourselves, I think it may be admitted that in this great public exhibition of science and knowledge, Æsculapius has no cause to be ashamed of his progeny. The sciences were all assembled, and Medicine bore nearly one-sixth of the labours of the whole.

AUTOGRAPHS.—The following curious notice appears in the *Anglo-African*, published at Grahamstown:—"We are anxious to collect the autographs of all our subscribers, and therefore request all, whether in the city or country, to enclose the amounts due in a letter, with their several signatures."

GENERAL CORRESPONDENCE.

RULES FOR GUIDANCE IN CHLOROFORM ACCIDENTS.

Letter from Dr. Kidd.

[To the Editor of the Medical Times and Gazette.]

Sir,—I would wish, with your permission, to make three or four remarks on the two very remarkable instances of death from chloroform recorded in the last number of your very valuable Journal; they seem to me typical cases of the two somewhat different forms of accident from this agent.

There are obviously two, if not three forms of death from anæsthetics; but none of them, what is generally known as "cardiac syncope." The object of my paper at Manchester, was to describe, as it appears to me, the death by apnœa, from rigidity or fixture of the diaphragm and respiratory muscles, so ably elucidated by Lallemand, Perrin, and Duroy, on animals. But I rather incline to agree with Professor Simpson, that Hospital experience brings us into familiarity with another sort of accident, also, in man, partly due to idiosyncracy and mental emotion as well as to certain operations on tendons, and curiously enough on the urethra, namely, sudden death from simple syncope, or, as the French term it, "*Sidemtion.*" The cases last week illustrate the two varieties. The third form of accident is that under ether, slow exhaustion, hebetude, extreme muscular relaxation, leading possibly to secondary hæmorrhage after amputations, etc. The pulse intermits in a marked manner under ether but not under chloroform. There is also diminution of blood corpuscles and plastic force of the blood from ether; it is about one-third safer than chloroform; and is, perhaps, only advisable where we want great muscular relaxation, viz., in reduction of dislocations, hernia, etc., but not where we have to fear secondary hæmorrhage.

I have been asked to put on paper a few of the leading practical points to guide administrators of chloroform. I think, with the wide circulation your Journal possesses in the Hospitals, it would be desirable to do so through its means.

I am, &c.

Charles Kidd, M.D.

Saekville-street, October, 1861.

I. Young patients, up to fifteen, and females bear chloroform best; there seems a general "tolerance" of chloroform in large surgical operations, probably from the hæmorrhage keeping the blood moving and preventing engorgement of the cavities of the heart; in females the reflex system is more active than in males.

II. Anæsthesia under chloroform is not at all of the nature of imperfect oxygenation of the blood. But this imperfect oxygenation may be superadded and run parallel with anæsthesia, leading to fainting fits after the administration; this is shown also by the plunging or violent efforts of the patient, from black blood in the muscles: even fresh concentrated vapour, from fresh additions to the inhaler, increases these muscular efforts, and always suggest the necessity of more air to the patient.

III. Where simple syncope is feared from fright, it is well to postpone the operation for a week, feeding the patient during this interval on meat and wine: the latter strengthens the muscles of the heart; it is well to bring such a patient under the chloroform, too, in a quiet ward rather than in the excitement of the operating-theatre.

IV. A passive, fixed, starting forward of the eyes, sudden contraction of the pupil, probably from spasm of the fifth nerve, and sudden change of the countenance, are the first signs of danger; the pulse may remain unchanged; chloroform should be kept warm (100° F.); this prevents coughing, which is also a dangerous symptom.

V. Simple syncope is much more dangerous than apnœa; it occurs, however, less frequently.

VI. The operations where nearly all the accidents have occurred have been those for removal of toe-nails, dead phalanges, tooth-drawing, strabismus, etc., operations on testis, reduction of dislocations,—all more or less connected with tendinous tissues.

VII. The right side of the heart, in apnœa cases, continues to beat long after the pulse stops. Probably while the iris of the patient contracts on approach of light we have a fair chance of waking up the entire heart: the right side of the heart will beat twelve or sixteen hours after the pulse at the wrist. Faradisation of the phrenic nerve or spine will set the heart in full action in animals through the renewed action of the respiratory muscles. Pulling out the tongue by forceps, so common hitherto in accidents, is a mistake; irritation of the nerves of deglutition stops the diaphragm.

VIII. Of 125 deaths, 54 occurred immediately before operation; 42 during small operations (syncope?); 25 from ether. The number of males in all returns seems to be exactly double that of females, though chloroform has been used in at least 30,000 cases of midwifery, and syncope is common in females. This leads to a suspicion that the deaths from chloroform are like railway accidents in the management of cases.

IX. Vomiting, as in cataract cases, is best prevented by an aloetic purgative beforehand an hour or two; the stomach also to be empty at the time of operating, and the chloroform pushed well to deep anæsthesia.

X. The "cardiac syncope" of Snow is partly a post-mortem change. These are all cases of apnœa, or where the mischief arises essentially from fixture of the diaphragm. The heart, in fact, pulsates longer than the lung will receive or return the blood—hence the congestion, increased also by the efforts made at resuscitation by the Surgeon himself.

XI. As to resuscitation, the means adopted at first should be as gentle as possible: a candle-wick gone out is to be blown in, not smothered by the *nimia diligentia*. Fanning the patient with cold fresh air is first in importance; the hands dabbed with cold water, which has a powerful influence in exciting the brachial and heart nerves. Too much cold water is not advisable. The patient should be brought at once into the open air, if summer, or into a very warm room, if winter; turned on his right side; the soles of the feet and interior of the ear tickled with a pen; his left arm held up, smacked with a wet towel, and that axilla and side of chest dashed with cold water; then artificial respiration tried by "up and down" pressure rather than "rotations." Two or three needles next stuck where the omo-hyoïd lies at the outer edge of the sterno-mastoid, so as to hit off, if possible, the phrenic nerve; then the *moist* pole of a Faradisation apparatus tried over the part, or along the spine; the other pole inserted under the floating ribs.

XII. It is probable, in the milder cases, the previous measures will succeed, especially in the instances of apnœa; but if, after five minutes' trial, little progress is made, then tracheotomy is to be done, and a small tube (a No. 10 india-rubber catheter) passed, and air blown gently into the lungs (a large tube causes emphysema). Some ammonia and warm water should be thrown into the rectum. In syncope cases, transfusion into a vein of warm water with a little soda in it may wake up the heart. In apnœa (asphyxia as regards the heart, the right cavities gorged), opening a vein is useful. These measures should be continued for at least four to six hours, the body kept warm by hot blankets in a semi-recumbent position, the battery, gases, and impure air of a crowd of students rigidly excluded; pure oxygen gas also to be avoided.

POOR-LAW MEDICAL REFORM.

Letter from Dr. Fowler.

[To the Editor of the Medical Times and Gazette.

Sir,—Permit me through your columns to inform the Poor-law Medical Officers, more especially of the Metropolis, that the Fifth Report from the Select Committee on Poor Relief (England), has been issued. It contains the whole of the minutes of the evidence of Mr. Griffin, of Weymouth, Dr. Rogers of the Strand Union, and myself.

I may be permitted to observe, however, that the time and the circumstances were unfortunate and unfavourable to us. Although summoned to attend, it was generally believed that the Committee would not have time to examine us, or to go at all into the Medical branch of the enquiry. Certain gentlemen had been delegated by the Guardians of the Bristol Union to give evidence on that day, but owing to their non-arrival in time, the Medical witnesses were hurriedly called in to be examined. Thus a subject,—not only of anxiety and

concern to over 3000 Medical gentlemen, but also of infinite importance both to the well-being of 4,000,000 of the poorer population of the country, and to the pockets of the rate payers of the whole kingdom,—instead of receiving a complete and searching investigation, was compressed into the few remaining hours of the very last day's sitting of the Committee. Medical questions seem at as much a discount in a Parliamentary Committee Room, as in the body of the House of Commons.

The members of the Committee soon tired with Mr. Griffin's voluminous evidence, which was ultimately put in as read. Dr. Rogers and myself had to be content with the last minutes of the last hour. My examination did not commence till twenty-five minutes to four. Knowing that it would be practically impossible to give in twenty-five minutes, the detailed evidence I had prepared, and to read the documents and facts, which had been furnished me, in support of the statement adopted by the Metropolitan Poor-law Medical Officers (*vide Medical Times and Gazette*, May 18th ult.), I requested permission (after answering a few questions) to be allowed to put in the aforesaid statement, as well as an abstract of the views embodied therein, with the understanding that my detailed evidence in support of the same should be taken in the next Session, when the Committee will, I believe, obtain leave to sit again. The Statement and Abstract therefore appear in this Report of the Committee.

I subsequently also obtained permission to deliver in a memorandum embracing in detail the views I was prepared to give evidence upon. This memorandum appears as an Appendix (No. 2, page 86) to the Report. I am sorry, however, to observe that not only have some verbal inaccuracies, and faulty arrangement of certain of the paragraphs crept therein, but, owing to an omission, in some portions of it, of sheets of my manuscript and tables, the sequence of the reading is in some places rendered totally non-apparent, and the sense considerably obscured. This is owing to my not having been furnished with proof sheets of the memorandum during its passage through the press. It appears that unless the sanction of the Chairman of the Committee is first obtained, the Parliamentary printers do not allow proof sheets for correction. This unfortunately had not been done; and shortly after the manuscript memorandum was in the printer's hands, the Right Honourable Charles P. Villiers had commenced his continental tour, and his sanction was not then obtainable.

At page 89 the chief omissions occur. The reader will readily surmise that, after the paragraph ending "convenient of access" should follow the "cases" alluded to; and also that the next parapraph should have commenced with the assertion that "In the metropolis the distance between the poor and the relieving officer, etc., is, as a rule, not too great."

A great quantity of important manuscript (with many tables) has unfortunately been omitted after the paragraph in the next column of page 89, which ends with the words, "by the case." I have demonstrated the want of uniformity and equality in the salaries (among others) of the District Medical Officers of the three City Unions. I also stated how the application of these officers of the East London Union for an increase of salary, was met at their Board by a return, showing the rate per head of the sums paid for Medical relief, on the population of several Metropolitan Unions and parishes. This preamble is absolutely necessary to render intelligible the succeeding paragraph, which is, however, a part only of my illustration of the fallacy of thus computing Medical salaries. At page 93 the reader will also detect the absence of a requisite preamble to the last paragraph of the first column, commencing, "In every case." In the second column there is also entirely omitted before, "3. Pauper Lunatics." No. "2" case in point, viz.:—Ody *versus* the Harborough Guardians. The verbal inaccuracies and the faulty arrangement of some of the paragraphs will at once strike the reader without my occupying further space with their enumeration.

It will be for the Committee of the Metropolitan Poor-law Medical Officers to determine whether or no it will be advisable to furnish the Parliamentary Poor-law Committee next Session with those details and facts that have been omitted.

Owing to the lateness of the Session when the Medical evidence was received, it was not considered desirable to present to either of the Houses of Legislature, the petitions agreed upon at the general meeting of the Metropolitan Poor-law Medical Officers on May 10, ult. The petitions embody the statement (which appears in the aforesaid Appendix, and) which was adopted at the meeting at the rooms of the Royal Medical Benevolent College. The petitions are still in circulation for signatures, and will be presented at the next Session of Parliament.

I will, in conclusion, take this opportunity of drawing the grave attention of the whole body of the Poor Law Medical Officers to this very important fact. From the remarks of the Chairman, made both to Mr. Griffin and myself, it is evident there is, and will be, a very strong endeavour on the part of the guardians to obtain the annulling of the permanency of our appointments. It is well known that many of the Boards of Guardians are in opposition to a continuance of the present powers of the Board above. Unless, therefore, great care and exertions are used during the recess by the Medical Officers, we may find that the results of the Committee's labours will be a compromise, in which the annual appointment of all the Officers of the Union will be thrown in by the Poor-law Board as a "sop in the pan," to mitigate and appease the antagonism of the guardians to the re-obtainment of the protective powers of Gwydyr House.

I am, &c.

Robert Fowler, M.D. Edin.

Hon. Sec. to the Com. of Met. Poor-law Medical Officers.

145, Bishopsgate-street Without, October 1.

OBITUARY.

JAMES WILLIAM CUSACK, M.D.,

Surgeon in Ordinary to the Queen in Ireland, and University Professor of Surgery in Trinity College, Dublin.

Two short years ago three adjoining houses in the Irish metropolis, Nos. 7, 8, and 9, Merrion-square, North, were occupied respectively by Dr. Cusack, Dr. Montgomery, and Sir Henry Marsh, Bart, M.D., each foremost in reputation in his several department of Surgery, Midwifery, and Medicine. Of each, alas! it is now true, that "his place knows him no more." The halls which twenty-two months ago were crowded with anxious seekers after health, are now deserted, or have passed into other hands. In December, 1859, it was our melancholy duty to record the death of Dr. Montgomery; in December, 1860, Sir Henry Marsh was suddenly taken from among us; and now, writing on the last day of September, 1861, the day on which his funeral is appointed to take place, it is our sad task to announce that on the evening of September 25, Dr. Cusack, the respected head of the Surgical Profession in Ireland, succumbed, after about ten days' illness, in the 74th year of his age, to one of those attacks of bronchitis with asthma from which he has of late years frequently suffered.

Descended of an ancient family, Mr. Cusack entered the Medical Profession with all the *prestige* of a distinguished University career. In the year 1807 he obtained a scholarship in Trinity College, Dublin, and subsequently, on taking his degree, a classical gold medal. On receiving his letters testimonial from the Royal College of Surgeons in 1812, he became Resident Surgeon in Steevens' Hospital and was appointed Surgeon to Swift's Hospital for the Insane. With the former of these institutions he was connected as Resident or Visiting Surgeon during the lengthened period of forty-five years. He has himself stated to the writer of this notice that his repugnance to operation and his diffidence in operating were at first extreme; nevertheless, he soon became an expert, bold, and able operator, and his practice rapidly became extensive. Mr. Cusack was one of the original projectors of the Park-street School of Medicine, where he lectured for many years. In 1850 he took the degree of M.D. in the University of Dublin; in 1852 he was elected to the University Professorship of Surgery, founded in that year; and in 1858, on the death of the late Sir Philip Crampton, Bart., he was appointed Surgeon in Ordinary to the Queen in Ireland. In the same year he had, for the third time, been elected President of the Irish College of Surgeons.

Dr. Cusack has from time to time contributed to Surgical literature numerous papers of great practical interest. These are to be found chiefly in the "Dublin Hospital Reports," 1817—1830; the *Dublin Journal of Medical and Chemical Science*, first series, 1832—1846; and the *Dublin Quarterly*

Journal of Medical Science, 1846–1861. Among these are papers on the Treatment of Aneurism by Compression, on Venereal Disease of the Testicle, on Rupture of the Bladder, on Cleft Palate, on Amputation of the Lower Jaw, etc. In the fourth and fifth volumes of the last-named Journal Dr. Cusack published, in conjunction with Dr. Stokes, a most important paper on the Mortality of Irish Medical Practitioners, creditable alike to the head and heart of its philanthropic authors.

Among the many eminent men whose loss the Profession in Dublin has of late years had to deplore, there was none who enjoyed more fully the confidence of the public than did the lamented subject of this memoir. But we may bear a still stronger testimony to the worth of Dr. Cusack, namely, that of none is it more true that he enjoyed the entire confidence of his Professional brethren. In any question of practical difficulty, where the life of the patient so often depends upon the decision and judgment of the Practitioner, or upon any subject involving the honour and welfare of the Profession, Dr. Cusack's opinion was sought for and received with that deference and that confidence which his sterling honesty, his straightforward dealing, his long experience, and his sound judgment so fully justified. His death leaves a void which will not easily be filled.

(From a Correspondent.)

Death has been rife among the members of the Medical Profession in Dublin during the last few years. Graves, Harrison, Crampton, Montgomery, Marsh, Porter, and Rynd —all distinguished men, memorable in their day and generation, and highly esteemed by the public, have passed away in rapid succession; but during the last forty years no member of the Medical Profession—Physician or Surgeon—attained to higher eminence, or was more honoured by the public, and more trusted by the Profession, than James William Cusack, who died on Wednesday evening, September 25, in his seventy-fourth year, at his residence in Merrion-square. He had suffered much from bronchitis of late years, but it was hoped by his friends and Medical brethren that, with care, he would live many years. The week before last he caught cold, but, undeterred by the harshness of the weather and uninfluenced by the entreaties of friends, he determined on fulfilling his public duties, and on Saturday, September 14, he visited Swift's and Steevens's Hospitals, and also received patients at his house. The Profession throughout the provinces, as well as in the metropolis, will learn with sorrow the decease of the head of the surgical branch of the Medical Profession in Ireland. The public has to mourn a kind friend, an able and most astute Physician, as well as the most bold and dexterous operator of his day, and the Medical Profession in all its branches has sustained an irreparable loss in the passing away of the man who shed a lustre on the Dublin School of Medicine, who was the embodiment and impersonation of Professional honour and honesty, and of whom, now dying full of years and honours, it may be said, as Pope did of Addison, that throughout that long and unsullied career

"He sought no private end,
He gained no title, but he lost no friend."

He was a great Medical Surgeon, observant, cautious, and far-seeing; and his practice (as well as all the actions of his life) was characterised by strong common sense. No one ever heard him utter a frivolous or a foolish expression, and he was utterly devoid of personal vanity. In the good old days of apprenticeships, he educated more Surgeons than any other man in the Profession, and we believe he has left one of the largest fortunes ever accumulated by a member of the Medical Profession in Dublin. Undemonstrative, yet firm, in opinion, his patients accepted his word as law, and he was one of the *safest* consultants which a Professional brother could possibly have recourse to. Upon a future day we hope to be able to present our readers with a memoir of Cusack and his times..

Dr. Cusack was up on Sunday, Sept. 22, and hopes were entertained of his recovery until Tuesday night, when he began to sink rapidly, and died on Wednesday at 9 o'clock p.m.

The deceased was a scholar of Trinity College, and Regius Professor of Surgery in that University. He was Consulting Surgeon of Steevens's Hospital and of Swift's Hospital. He was also one of the founders of the Park-street School of Medicine. For a long period he was Secretary to the Royal College of Surgeons, Ireland, and was President of that Institution on more than two occasions. On the death of Sir Philip Crampton he was appointed Surgeon in Ordinary to the Queen in Ireland, was also a member of the Board of Superintendence of Hospitals, and Consulting Surgeon to St. Mark's Ophthalmic Hospital.

MEDICAL NEWS.

Royal College of Physicians of London.—At the Comitia Majora held on Monday, September 30, the following gentlemen, having undergone the necessary Examination, were duly admitted Members of the College :—

Jackson, John Hughlings, Finsbury-circus
Rogers, Henry Philip, Mauritius.

The following gentlemen passed the Preliminary Examination in the subjects of General Education on September 27 :—

Atkins, Charles Alfred, St. George's Hospital
Creaser, William Appleton, Hull
Cribb, Henry, Bishop's Stortford
Dawson, John, Great Yarmouth
Forman, Elijah Baxter, Guy's Hospital
Fox, Cornelius Benjamin, King's College
Francis, Alfred Ollivant, Brierly-hill
Long, Charles Frederic, Ipswich
Lyons, William, Portugal-street, Lincoln's-inn-fields
Manser, Frederick, Chatham
Myers, Charles John, Tottenham
Spooner, William, University College
Webb, John Holden, Devon and Exeter Hospital.

Apothecaries' Hall. — Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, September 26, 1861 :—

Ballander, John Henry Moffat, Sedgly, near Dudley
Clay, Arthur Hanley, Stamford
May, Thomas Frederick, Newcastle-on-Tyne.

The following gentlemen also on the same day passed their First Examination :—

Badcock, Louis Carter, Camberwell-grove
Rawlins, William Peter, University College
Richards, Henry Ebenezer, St. George's Hospital.

Names of gentlemen who passed their Previous Examination in Arts, on Friday and Saturday, September 27th and 28th :—

Barringer, T. S. W., St. John-street, Clerkenwell
Bindley, C., New-street, West Bromwich
Boiton, C. B., Coleshill, Warwickshire
Busby, Allen, Leamington
Connolly, B. B., Unity-place, Woolwich
Farrington, A. C., Ottery St. Mary's, Devon
Glanville, N., Stainsby-cottage, Willow-vale
Gray, Jno. Henry, Montague-place, Poplar
Hiron, William N., St. Paul's-square, Birmingham
Jones, Alfred Orlando, Upper Vernon-street
Lister, C. H., Hall-gate, Doncaster
March, J. Ogden, jun., Westbourne-house, Emsworth, Hants
Marshall, F., Upper Marylebone-street
Milward, James, Guy's Hospital
Plaister, W. Henry, Bristol Royal Infirmary
Ridout, C. L., Egham, Surrey
Rigden, George W., Canterbury
Rowdon, H. M., Nottingham-place, London
Smith, H. B., Newark
Sykes, Walter J., Southgate, Wakefield
Taylor, James Mare, Queen's College, Birmingham
Thorp, D., College-crescent, St. John's-wood
Tryon, Samuel, Queen's-road
Ward, Henry, Middle-street, Brighton
West, M. T., Wood-street, Woolwich
Wickham, James, Mincing-lane
Wicks, Frederick, Connaught-place

APPOINTMENTS.

Beddard.—James Beddard, M.R.C.S. Eng., has been appointed Medical Tutor at the Sydenham College, Birmingham, in the place of Charles James Bracey, M.B. Lond., M.R.C.S. Eng., resigned.

Blood.—Michael Blood, M.R.C.S. Eng., L.S.A. Lond. has been appointed one of the Vice-Presidents of the Medical and Surgical Society, of Jersey, for the ensuing year.

Braddon.—Charles Hitchman Braddon, M.R.C.S. Eng., L.S.A, Lond., has been appointed Physician's-Assistant at the Manchester Royal Infirmary and Dispensary.

Byerley.—Isaac Byerley, Fell. and M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical officer for District No. 4, of the newly formed Birkenhead Union, Cheshire.

Daniel.—Richard Sylvester Daniel, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer for District No. 3, of the Birkenhead Union.

Davies.—Edward Davies, M.D., has been appointed Surgeon to the Wrexham Infirmary, in place of William Rowland, Esq., resigned.

DOWNING.—Samuel Dawson Downing, L.R.C.P. Lond., M.R.C.S. Eng., has been appointed Medical Officer for District No. 2, of the Birkenhead Union.

FIXOTT.—John Fixott, M.D., S. and M. Gottingen, M.R.C.S. Eng., L.M. Dub., has been elected President for the year, of the Medical and Surgical Society of Jersey.

FOWLER.—Mr. C. H. Fowler, Apothecary to the Middlesex Hospital, has been appointed Colonial Surgeon to the Island of St. Helena.

GODFRAY.—Charles Le Vesconte Godfray, M.R.C.S. Eng., and L.M., L.S.A. Lond., has been appointed Medical Officer for one year to the General Hospital, Jersey, in place of George Matthew Jones, L.R.C.S. Edin., M.R.C.S. Eng., deceased.

HEYGATE.—James Heygate, M.D. Edin., M.R.C.S. Eng., has been appointed Consulting Physician to the Derbyshire Infirmary on retiring from the post of Physician.

HOLMES.—Timothy Holmes, M.A. Cantab, F.R.C.S. Eng., has been appointed Surgeon to the Hospital for Sick Children, Great Ormond-street, in the place of Athol Archibald Johnson, F.R.C.S. Eng. (exam.) resigned.

HUGHES.—William Hugh Hughes, M.R.C.S. Eng. (1861), L.S.A. Lond. (1861), has been appointed Physician's-Assistant, at the Manchester Royal Infirmary and Dispensary.

LAMBERT.—James Lambert, M.D. Glasg., M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer to District No. 1, and to the Hospital, of the Birkenhead Union.

LANGWORTHY.—John Moysey Bartlett Langworthy, M.R.C.S., has succeeded the late Samuel Reeves, M.R.C.S. as Poor-Law Medical Officer for District No. 11, of the Kingsbridge Union, Devonshire.

MORRIS.—John Thomas Morris, M.D. Edin., M.R.C.S. Eng., has been re-appointed Medical Officer for one year, for the Deddington District, No. 2, in the Woodstock Union, Oxfordshire.

PHILLIPS.—T. Bacon Phillips, M.D. Univ. Aberd. L.R.C.P. Edin. (exam.), M.R.C.S. Eng., L.S.A. Lond., has been elected Physician to the Brighton and Hove Dispensary in the room of Dr. Almeric W. Seymour, resigned.

ROWLAND.—William Rowland, F.R.C.S., has been elected Consulting Surgeon to the Wrexham Infirmary.

SHORE.—Offley B. Shore, M.D. Univ. Edin. (1860), has been appointed Physician to the Derbyshire Infirmary in the room of Dr. Heygate, resigned.

SMITH.—Thomas Smith, M.R.C.S. Eng., has been appointed Assistant-Surgeon to the Hospital for Sick Children, Great Ormond-street, in the place of Mr. Holmes, who succeeds Mr. Johnson as Surgeon.

SWINSON.—George Newton Swinson, jun., L.R.C.P. Edin. (exam.), M.R.C.S. Eng., has been re-appointed Medical Officer and Public Vaccinator, for one year, for the Kidlington District in the Woodstock Union, Oxfordshire.

VAUDIN.—Charles Vaudin, L.R.C.P. Edin., M.R.C.S. Eng., has been elected one of the Vice-Presidents of the Jersey Medical and Surgical Society for the year 1861.

DEATHS.

AIKENHEAD.—September 22, at Curzon-park, Chester, John Aikenhead, late of Manchester, M.D.

ATKINSON.—September 21, at Garstang, very suddenly, Thomas Wilkinson Atkinson, late of Broughton-in-Cartmel, Lancashire, M.R.C.S. Eng., L.S.A. Lond., aged 49.

CUSACK.—September 25, James William Cusack, of Merrion-square, North, Dublin, M.D. and A.M. Trin. Coll. Dub., F.R.C.S. Ireland, C.M. Univ. Dub., aged 72.

JACKSON.—September 21, Thomas B. Jackson, M.D., Medical Officer for many years of the Swords Dispensary, Dublin.

KING.—September 25, at Lincoln, Philip Henry King, formerly of Chesterton-road, Cambridge, L.R.C.S. Edin., L.S.A. Lond., aged 36.

MORGAN.—Recently, Alexander Braithwaite Morgan, Surgeon in the Army on half pay, formerly of the 57th Regiment of Foot.

SALTER.—July 31, after a few days' illness, on board H.M.S. *Narcissus*, in the Bay of Natal, Arthur Salter, Staff Assistant-Surgeon, Army, aged 31.

SMITH.—September 28. John Smith, of Cappoquin, Co. Waterford, Fell. and L.R.C.S. Ired., M.D. Univ. Glasg.

TROUTBECK.—July 7, James Troutbeck, of Tunstall, Staffordshire, M.R.C.S. Eng., L.S.A. Lond., aged 47.

WRIGHT.—Recently, Robert Wright, (in practice prior to 1815,) Surgeon in the Army on half pay.

THE following Address, signed by all the Medical Profession of the neighbourhood, was presented at a farewell dinner:—Dear Dr. Battersby,—Before you take your departure from among us, we must be permitted to express our feelings of regret at losing so valuable a friend, and so estimable a member of the Medical Profession. Devoted to the interests of your patients, conciliatory and just towards your professional brethren, your unassuming deportment but added to the value of your high scientific attainments and well known Medical skill. While we regret your departure on our own account, we cannot but congratulate those who will be so fortunate as to have you among them; though we trust that with renewed health and strength, we shall ourselves have the satisfaction of again seeing you at Torquay. Richard T. Evanson, James Tetley, W. H. Madden, Robert Stewart, C. Paget Blake, William Pollard, jun., W. Wilking Stabb, Joseph Goldstone, James Evans, York J. Moore, James Pollard, Henry Appleton, William G. Coombs, C. B. Nankivell, William England, J. B. Toogood, J. J. Goodridge, John Tompson Goodridge.

VITAL STATISTICS OF LONDON.

Week ending Saturday, September 28, 1861.

BIRTHS.

Births of Boys, 925; Girls, 923; Total, 1848.
Average of 10 corresponding weeks, 1851-60, 1659·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	578	530	1108
Average of the ten years 1851-60	633·0	574 I	1208·1
Average corrected to increased population..	..	..	1329
Deaths of people above 90	2	..	2
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	1	7	1	4	6	9
North ..	618,201	..	3	15	2	8	8	15
Central ..	378,058	..	..	8	1	7	10	5
East	571,129	..	2	5	2	7	10	15
South ..	773,160	1	5	21	7	11	12	24
Total.. ..	2,803,921	1	11	55	13	36	45	68

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·459 in.
Mean temperature	53·8
Highest point of thermometer	66·2
Lowest point of thermometer	37·7
Mean dew-point temperature	48·9
General direction of wind	S.W.
Whole amount of rain in the week	0·92 in.

Medical Times and Gazette.

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BOOKS RECEIVED.

Memoirs of Marshall Hall. By his Widow. London: 1861.

A Survey of Human Progress. By Neil Arnott, M.D. London; 1861.

Medical Jurisprudence. Seventh Edition. By A. Taylor, M.D. London: 1861.

Manual of the Practice of Medicine. By C. H. Barlow, M.D. Second Edition. London; 1861.

Manual of the Dissection of the Human Body. By L. Holden, F.R.C.S. Second Edition. London: 1861.

The Climate of Pau. By Alex. Taylor, M D. London: 1861.

Eastbourne as a Resort for Invalids. By Drs. Smith and Hayman. London: 1861.

Mentone and the Riviera. By J. H. Bennett, M.D. London: 1861.

Bowman's Practical Chemistry. Fourth Edition. Edited by C. L. Bloxam. London: 1861.

The Pathology and Treatment of Venereal Diseases. By F. T. Bumstead, M.D. Philadelphia: 1861.

A Glossary of Mineralogy. By H. W. Bristow, F.G.S. London: 1861.

A Manual of Chemistry. By W. Odling, M.B., F.R.S. Part I. London: 1861.

Food. By E. Lankester, F.R.S. London: 1861.

Sowerby's British Wild Flowers. Parts II., III., IV., and V. London: 1861.

The Sounds caused by the Circulation of the Blood. By A. Leared, M.D. London: 1861.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Stoningstreet's case shall appear next week.

An Old Subscriber.—If the relieving officer decide that the female is a pauper, the Guardians will probably support him, and may resist payment, although such a case ought clearly to be included in the extras.

Pelvis.—The question should be put to a stockbroker.

Dr. Carson's note shall appear next week.

Economos writes to know "where and to whom benefactions to the *Medical Trust Society* are to be paid in."

Cymon.—It can only be under very peculiar circumstances that a Medical attendant is justified in revealing anything communicated to him by a patient in confidence. When upon oath, he must submit to the directions of the judge.

A correspondent has directed our attention to the works of a Mr. Washington Evans, who seems by his advertisements to mix up the office of a prophet with that of leech. We use the last word as an old Anglo-Saxon description of one who practises the healing art, because we are not aware whether Mr. Evans, although he calls himself "Dr.." is registered under the Medical Act, or possesses any right to any modern Medical designation:—

"An uncommon book.—Price 1s. 6d., post free 18 stamps, the Will of God to the Invalid as Revealed in the Scriptures, God's way of Preserving Health, and restoring it when lost. Houlston and Wright, 65, Paternoster-row, and all booksellers.

"Fourteenth edition, price 1s. 6d., or 18 stamps post free.—A pure mind in a pure body, that is health.—The Antiseptic Treatment. On Indegestion, Nervousness, Low Spirits, Ulceration and Irritation of the Mucous Membrane, Spermatorrhœa, Consumptive Symptoms, and Asthma. H. Baillière, 219, Regent-street, London; and of all booksellers.

"Just published. The Blood of the Aristocracy, 2s. 6d., bound. On Health and Disease: Beauty, How Attained. Hints to Invalids, Nature's mode of cure. In this work is some of the most valuable original thought. Houlston and Wright, 65, Paternoster-row, London."

Our correspondent complains that respectable publishers should lend their names to such works; and as we have taken the trouble to procure two of them to judge for ourselves, we can but express our opinion that the complaint is well founded. The books are utterly worthless, ungrammatical productions, and it is strange to see them advertised incessantly with the name of Baillière after them. By-the-bye, at the end of these books, we see an advertisement of the Ladies' Sanitary Association. Can it be possible that this Association patronises Mr. Washington Evans?

A Query.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Is there any foundation in fact for the belief that the use of rice as a sole or principal article of diet, does sometimes cause blindness in man?

I am induced to ask the question from the statement of a youth, just returned from Calcutta by way of the Cape, who assures me that four dozen fowls, shipped at the former place, and fed during the voyage solely on rice, soon became blind, and, to use his expression, "their eyes rotted out." A parrot also died with the same symptoms.

I am, &c. J. S.

Is the Snowberry Poisonous?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can you or any of your correspondents inform me whether the fruit of the common snowberry (*Symphoricarpos vulgaris*) is known to possess poisonous properties? I have just seen a case in which violent diarrhœa, with convulsions, came on in a child four years old, previously in perfect health, after eating several of the berries. Life appeared for some hours to be in imminent peril, but the child has since recovered, after a slight attack of muco-enteritis.

The symptoms at first were so urgent that I suspected poisoning, and on examination of the evacuations found undigested portions of the berries above-mentioned, which the child afterwards acknowledged she had eaten a few hours previously.

As the snowberry and its congeners the honey-suckle tribe, seem to be generally considered harmless, I shall be glad of further information on the subject. I may add that the symptoms could not have been produced by mere indigestible matter, for it had not been taken in sufficient quantity; nor by worms, for none could be found.

I am, &c. J. T. Fowler, B.A., M.R.C.S., &c.
Formerly House-Surgeon to St. Thomas's Hospital, and to the Bradford Infirmary.

Poor-Law Medical Reform Association.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Permit me space to inform the Poor-Law Medical Officers that the Medical evidence laid before the Select Committee on Poor Relief is now in print, and may be procured through any bookseller for 1s. 1d., or by forwarding seventeen postage stamps to Messrs. Hansard, 6, Great Turnstile, London, W.C., and thus ensuring its immediate receipt. Its title is, "Fifth Report—Poor Relief, England, ordered by the House of Commons to be printed July 26, 1861." The Report, Appendix and Tables occupy ninety-five folio pages. The importance of the subject is so great that I trust every Poor-Law Medical Officer will carefully examine the evidence, and thus prepare himself to combat any opposition that may be raised against the changes recommended. It is possible some parts of the evidence may not meet with universal approbation, but I hope all minor points will be waived, and that a general support will be given to the provisions suggested. Unless this course be pursued, it will be in vain to expect the Select Committee to recommend to Parliament any material improvement in the position of the Poor-Law Medical Officers.

I am, &c. Richard Griffin.

12, Royal-terrace, Weymouth, September 28.

P. S.—I believe it is customary to send a copy of any work to be reviewed by the Editor of a journal, but in this instance I trust the omission will be excused, as my Medical brethren have not provided the means to do so.

Advertising by Testimonial.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following advertisement reads badly by the light of your leader on the puffing system, in which certain Members of the Profession take a share:—

"Cod Liver Oil.—Dr. J. Hughes Bennett, Professor of the Institutes of Medicine in the University of Edinburgh, in referring to G. Dickson Moffat's preparation of Cod Liver Oil, says—'I have much pleasure in recommending it as one of the best and most genuine Cod Liver Oils which has ever been made.'"

It is from an Edinburgh paper sent here regularly. I am, &c.
Birmingham, October 2. A Reader.

COMMUNICATIONS have been received from:—

Dr. Jenner; Mr. Barnard Holt; Dr. McWilliam; Mr. Soelberg Wells; Mr. Solomon; Dr. McGraith, Smyrna; Dr. Weber; Dr. Althaus; Mr. Wilde, Dublin; Dr. Bernays; Mr. Atkinson; Registrar-General; Dr. Fowler; Mr. Fletcher; Mr. Copney; and Mr. Morris.

APPOINTMENTS FOR THE WEEK.

October 5. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

7. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Medical Society of London, 8½ p.m. Opening of the Session. A Paper by W. Coulson, Esq., the President.

8. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

9. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

10. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

11. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

OPENING OF THE LONDON MEDICAL SCHOOLS.

ST. THOMAS'S HOSPITAL.

Dr. Albert J. Bernays, the Professor of Chemistry at the College, said he presumed that many of them had selected the Profession of Medicine and Surgery to which they were about to devote themselves. If not, he would wish them to pause before they plunged into a career for which, perhaps, they were not suited, and to consider with him for a short time what was committed to the care of a Medical man, and how a student might qualify himself for successful practice. If they asked him what was committed to the care of a Physician, he answered, the life, the sacred life of man, a life of such importance that our Maker had said, "He who sheds man's blood, by man shall his blood be shed." Surely, no mean thing this! Nay, rather, was there any greater calling? The Medical Practitioner should be a gentleman, if not by birth, by feeling and education,—able with discretion and delicacy to administer not to the body alone, but to many a mind diseased and afflicted. He should know how to possess his own soul in order to be duly enlightened as to the responsibility which he incurs in undertaking the care of another's life. And he must have knowledge. Without intelligence, knowledge, and industry, how could a man practise the Medical Profession? But the soul was not made to be a mere receiver of knowledge. No man had ever fallen in the pursuit after the likeness of God: but mere knowledge without God, had slain its thousands. God's power and majesty might be seen in Nature; His mercy and truth in the volume of inspiration. A knowledge of the former was very valuable, but a knowledge of the latter was indispensable. Was it difficult to attain? Thank God, no! It was all written within the compass of a small volume; all that they needed was a teachable spirit. And in the multiplicity of the student's work how thankful he should be for the Sunday. Let them not employ it for secular purposes, and if any portion of it were devoted to recreation, let it be that which their consciences approved. After having stated various reasons which should have induced the students to enter at St. Thomas's Hospital, Dr. Bernays addressed a few words to the students of the second and third years, reminding them that it was their class which would give character to the place. But there was another class of gentlemen among them, students for that one night only, who were about to take their departure and to enter shortly upon the exercise of the noble Profession which they had learned within those precincts. To them he would remark that mystery (except to quacks) no longer offered a shelter for ignorance, and were they accessible to no higher motives, their subsistence would be precarious if they should not be prepared to meet the criticisms of an enlightened age. There were certain partial systems of Medicine which, when universally applied, he was as ready as themselves to condemn, but as these systems had obtained a deep hold upon the public mind, he would take the liberty of recommending them not to abuse their professors, but rather, by argument, to expose their errors. This was the only way at the present day to meet them. The Hydropathist might recommend his pure water, its external and internal application, plain diet, healthy exercise, and rest from ordinary occupations. Above all things, when feasible, he will remove his patient from the scenes of his daily toil, and attract him to one of those beautiful mansions which his class occupy in various parts of the country. But allowing that such a system, applied universally, is worse than ridiculous, because destructive even of life, he would ask them in all humility, whether there were not many cases in which the Hydropathist was right, and he would further ask them why they allowed him a monopoly of what they themselves would occasionally consider beneficial? Why should they not have their sanataria for those who could afford to pay, but who wanted change of air, and simple Medical superintendence? Again, the Homœopathist might excite hopes by the administration of his wonderful globules, by regulating his patients' food, and especially by prescribing rest. In all this, if he were honest, if his globules were really what they professed to be, the harm he might do was rather negative than positive, although the good he often did by leaving Nature to her own great resources was frequently productive of a cure. The Homœopathist was a much more formidable foe than the Hydropathist. He had already in his toils many of the high-born, many legislators, many high-born men, but the people who fell most greedily to his prey were the partially educated, and they were the vast majority of the community. He was the foe which rising young Medical men had to encounter. If, as he believed, successful Homœopaths were none other than Allopaths in disguise, who made their medicines palatable and sightly, and who when their patients required it administered the billionth part of nothing in a sugared globule, and made them believe in its virtue—then, he asked them again, had they nothing to learn from such persons? Had they sufficiently directed the attention of druggists to the manufacture of medicine? Were there not many cases in which they treated people homœopathically? Then why not admit that there were cases in which the system of doing nothing, which was unadulterated Homœopathy, was the right thing, and thus take the bread out of the mouths of those whom they considered to be practising a false system? Were they aware that in many large schools it was already the practice to question the parents as to whether the children were to be treated homœopathically or allopathically? Did they know that their great prescription to boys was bed, coupled, of course, with the billionth of a grain of nux vomica in a wine-glass of water? And were not those before him quite as great advocates of rest to sick children? Then, again, there was Mesmerism. Now they might deny its truth, but that did not make it false. So then here was another opening for them to assert their knowledge, and to make their own practice more complete and effective. If they asked him how, he answered fearlessly, by a right use of the press. It possessed an importance as a means of public instruction wholly unknown in past ages. Upon its course depended the very destinies of society, and a wholesome or unwholesome state of the public mind. Power was changing hands, and was passing from the few to the many. Under God, everything depended upon the amount of talent and intelligence which found its way to the press. In proportion as they recognised its utility they would enlarge its field of usefulness, and give it that attention which it undoubtedly deserved at their hands. (Hear, hear.) He wanted to see sincere and serious men—men of thought and men of solitude—constant contributors to the daily and weekly press. He did not care to see their names appended, except occasionally, as a guarantee of good faith. Young Medical men, just rising into life, with much leisure, could greatly aid in enlightening the public upon many of the social questions of the day. He wanted to see them take a part in every public movement; and, whether in village or in town, he earnestly desired to see them acting with their leading men. From their education and their position as gentlemen, they had a right to the same vantage-ground as the clergy; and with them they could assist in subduing the common foe, ignorance, superstition, quackery. (Loud cheers.) Another great matter which pressed upon his mind was this—let them trust rather to the power of argument, employed through the medium of lectures, the press, and conversation, for the subjugation of quackery than to any external helps from the Legislature. He did not wish to depreciate governments, and certainly not our own—the most enlightened, especially at the present moment, with which any nation of the world has been blessed. But he would ask any reflecting person to think what were the functions of government, and after he had decided that point, he would put to him what he could desire from it, beyond a fair field and no favour, except a distinct recognition by it that the diploma a Medical man held qualified him to seek, with confidence, at the hands of his fellow-men, for their recognition of him as one competent to exercise the healing art. It seemed to him that there was great danger in the common attempt to commit all affairs to Government and to shrink from individual responsibility. If anything were needed at the present day, people as naturally referred it to the Government as they used to be in the habit of taking it in hand themselves. And when a measure had been passed, they were inclined to imagine that all would be well, that they need not longer give themselves any trouble about the matter, and that, in fact, their dreams, whatever they might be, would be carried out. To give an illustration of this habit of mind. A short time since there were two

terrible railway accidents. All England was startled. And yet, what was the remedy generally suggested? Did even the Liberal press, as a body, indicate the immense advantage of individual responsibility, in making the treasury of the Companies answerable for so lamentable a result? Not so. The only specific was Government interference—an interference which he honestly believed would result in far more frequent injuy to life and limb, unless it were carried out at an enormous expense to the nation. Let them take two cases in point. First, the subject of adulteration. The evils were to his certain knowledge greatly exaggerated, but even if they were as real as pretended, had not the Vestries sufficient legal powers? It was thought not, and so Parliament was tormented into passing a bill for the suppression of adulteration, a measure which was as costly as it was ineffective. The public press had done more to put down adulteration than could ever be accomplished by legislative enactments, unless carried out at an expense utterly disproportionate to its value. The other instance touched those present more closely. They had obtained the interference of Government in the matter of registration, with a view of suppressing quackery *vi et armis*. The whole matter need be placed on no other footing than this. Would they allow any body of men, extraneous to themselves, to decide in what the theory and practice of Medicine consists? They would scout the idea, and rightly! Their action in religious matters had been long since decided. They allowed the Mormon and the Shaker to nestle under the shadows of their churches and chapels, and unless this liberty were conceded, what was to prevent, in these shifting times, some future Government from expounding authoritatively its own notions of Medicine? Did it ever trouble their minds that we raise a large revenue from quack medicines? Parr's pills and Holloway's ointment are issued with the direct approbation of the Stamp-office, and so the Legislature upholds with the one hand what it offers to put down with the other. He recommended to them as an object of laudable ambition, to exert themselves to combat such gross anomalies. Whether the College of Surgeons could issue a few simple prescriptions which could be brought into common use through the agency of druggists, so that there might not be the dire blank occasioned through the withdrawal of the patent medicines, was merely a hint which he would venture to throw out. Of one thing he was sure—that they should assist in preparing the public mind towards the consummation of this desirable end. On this point he could not do better than read a passage from the celebrated Buckle: "To seek to change opinions by law is worse than futile. It not only fails, but it causes a reaction, which leaves the opinions stronger than ever. First alter the opinion, then you may alter the law. But, however pernicious any great interest or any great body may be, beware of using force against it, unless the progress of knowledge has previously sapped it to its base, and loosened its hold over the national mind. This has always been the error of the most ardent reformers, who, in their eagerness to effect their purpose, let the political movement outstrip the intellectual one, and thus, inverting the natural order, secure misery either to themselves or to their descendants." Addressing himself to the students again:—Let wisdom direct their footsteps, and the appreciation of whatever things were true, and excellent, and lovely, and of good report, characterise their actions by influencing their hearts. Around them clustered the hopes of parents, the sympathies of friends: if they defeated and blighted these feelings, they would produce disappointment in hearts that watched and prayed for their welfare. (Loud cheers.)

ST. GEORGE'S HOSPITAL.

Maxwell T. Masters, Esq., F.L.S., Lecturer on Botany, after welcoming the new-comers in the names of his colleagues and himself, addressed himself in the first place to the elder pupils, and commented on the recent changes in the staff of Lecturers, owing to the retirement of Mr. Cæsar Hawkins and Mr. Cutler. The lamented decease of Mr. Henry Gray was then dwelt on, and his zeal and energy held up as worthy examples to be followed. To those about entering the Profession, the peculiar rewards afforded by the conscientious discharge of their Professional duties were pointed out, as well as the means whereby such rewards might confidently be looked for. The most difficult part of the Profession to the well-educated young Medical man, after he had received his licence to practise, was the art of securing the confidence of his patients, or in more homely phrase, the art of "managing his patients." The favourable verdict of the public was to be obtained not so much by Professional skill, of which the public in general was no competent judge, as by the amount of general information possessed by the Practitioner, his character and demeanour, and by the degree of estimation in which he was held by his fellow-Practitioners. The good opinion of the latter was secured by the degree of Professional ability, and by the conduct of the Practitioner with reference to his fellow-labourers. The regulations enforced by the General Council and the various Boards of Examiners were devised with a view to secure to the pupil a good general education, and a good special one, not merely because by these means public favour and Professional sympathy would be secured, but because a good general education formed the best introduction to a good special one, and a good special one afforded the best means of promoting the advancement of Medical knowledge, and of relieving human suffering. In addition to studies of a directly practical character, the value of which was self-evident, the scheme of Medical education demanded also an acquaintance with certain collateral sciences, such as chemistry and natural history. Chemistry had done so much of late years for Medicine as to be almost deserving equal rank with the directly practical studies. The natural history sciences were of value on several accounts. They tended to foster that faculty of observation so necessary to the Medical Practitioner; the habits of observation and the mode of reasoning in use amongst naturalists were precisely of the same character as those employed by the accomplished Practitioner. Those sciences were also capable of much direct practical application to Medicine, of which several striking illustrations were given. Great stress was laid on the future importance of the philosophical study of natural history, as likely to afford, under proper treatment, a much broader and more comprehensive basis for rational Medicine than at present exists. In support of this the analogies between the geographical distribution of plants and animals, the circumstances inducing variations in them, and the causes and propagation of various diseases, were pointed out. It was shown how human physiology and human anatomy owed much of their present advanced condition to the fact that physiologists and anatomists had made use of facts derived from careful scrunity of the structure and functions of animals and plants; and on the other hand, the study of the conditions under which plants and animals live, grow, and vary, was shown to be necessary to the full understanding not only of their diseased condition, but also of human pathology. By extending the bases on which Medical knowledge rests, by gaining assistance from all sources, by judiciously interrogating Nature in all her departments, Hydra-headed quackery would be far better met than by the questionable agency of legislative enactments, and the Profession at the same time would not lay itself open to the charge of not perceiving the mote in its own eye. Let Medical knowledge be never so perfect, there must in all probability ever be diseased conditions beyond the ken of man and beyond his art to alleviate. In such cases the public, however enlightened, would still be apt to catch at any straw that would apparently save them from drowning. "*At si nulla valet medicina repellere pestem Dardaniæ veniant artes.*" The object of all Medical education, however, was the relief of suffering humanity, and to this end all available means must be employed; and hence the Lecturer enjoined his auditory to use to the utmost the opportunities presented them by the lecture-room and the Hospital as the only sure foundation whereon to accumulate and profit by the experience of the future. Mr. Masters was loudly cheered at the close of his Address.

KING'S COLLEGE HOSPITAL.

Professor Bentley alluded in the first place to the difficulty of the task which his colleagues had called upon him to perform, from the fact of his having no new ground to pass over, for the path (he said) had been trodden so frequently, so thoroughly explored by previous Lecturers, that upon looking back on the pathway of time, he could find no fertile spots to

dwell on, for all the flowers and fruits had been culled, and the plants from which they had been obtained left withering on the road. A path thus leading to no new and fertile pastures, with no flowers or fruits to be gathered, with scarcely a weed on the road side to cheer the weary traveller on his journey was not a very inviting one at any time to the deliverer of an Introductory Address, and when, as unfortunately happened at that time, the deliverer of the Address was a Botanist, who was never at ease without his favourite way-side weeds; and who, when removed from his own special subject, was like a plant out of its natural habitat, the task was rendered even more difficult and uninviting. Professor Bentley then proceeded to welcome those students who were returning to pursue their studies, as also the new students, to whom all his succeeding remarks were more especially addressed. He congratulated them on having chosen the Medical Profession as the sphere of their future labours, for there was no Profession, he believed, except that of the divine, that could bear the least comparison with it, either in the ennobling nature of its pursuits or in the sublimity and benevolence of its aims. He then further congratulated them on having entered the Profession at a favourable period, for whatever difficulties had formerly to be encountered by the Medical Practitioner, he believed that at the present time any gentleman thoroughly conversant with his Profession, who would act conscientiously in his dealings with his Professional brethren, with his patients, and with the general public,—in fact, "do unto others as he would they should do unto him,"—need have no fear, if health and strength be given to him, of acquiring not only a competency, but also a highly honourable position in society. Professor Bentley then alluded to the recent changes which had taken place in the courses of study required by the Examining Boards, more particularly dwelling upon that which rendered it compulsory on them to pass a Preliminary Examination in classics and mathematics. The latter change he regarded as one of the most important advances in Medical education that had been made for many years. He hoped that most of them, at least, had come up to enter upon their Professional studies after having received a sound and extensive general education, for they might rest assured, that in a Profession like their own, in which they would have to master a great many subjects, that such a foundation by training and developing the mental faculties, storing the mind with materials which they would have constantly to apply, and by the habits of study it would have led them to pursue, formed the best foundation for future success in their Profession as well as for their position in general society. How often, he said, do we see gentlemen entering upon the practice of their Profession with, as nearly as could be ascertained, the same amount of professional knowledge and skill, but varying as to their general attainments, and was it not an almost certain consequence of such a difference that he who possessed the best general knowledge took the lead from the first and continued to do so throughout his career? The Professor then dwelt briefly upon the various subjects of their professional curriculum, and urged them to attend, especially at first, to Anatomy, Physiology, and Chemistry, as such studies formed the foundation-stones as well as in a great measure the building materials of the professional edifice they would hereafter have to rear. Speaking of Anatomy, he said: Would any of you trust an ignorant mechanic with the repairs of a piece of delicate mechanism? how much more, therefore, was a perfect knowledge necessary of the complex machinery of the human body to him who would wish to treat its diseases and repair its injuries? It would be bad enough for an ignorant pretender to undertake the repairs of a piece of man's work, but what would be thought of him who undertook to treat the noblest work of God—a being with an immortal soul—in ignorance of its complex and delicate machinery? What a fearful responsibility would be hereafter entailed upon him who thus in ignorance attempted to practise his Profession? What would appease his conscience if under such circumstances he caused the injury of a fellow being? What that if he caused the death? The Professor then passed in review the other subjects of the students professional education, and then congratulated the College on having completed the greater portion of its new Hospital. Thanks to the munificence of the public, and the great sacrifice of time and money by the authorities of the College and Hospital, and the great skill of the architect, they had no longer a building of which they need be ashamed, as was formerly the case. Those who were connected with the College could not be too grateful to those who, by their unremitted toil and expenditure of money, had raised a Hospital in connexion with King's College of which they might feel justly proud. (Loud cheers.) The usefulness of the Hospital, and its efficiency as a school of teaching, would also be much increased during the present year, from the munificence of some of its friends, who had undertaken to bear the expense of a lying-in ward, where students of the College as well as nurses might receive sound practical instruction in Midwifery, and where, at the same time, poor married women, in addition to the best Medical skill, might receive the comforts and careful nursing which were so essential to them in their condition. In this highly-important addition to the usefulness and efficiency of the Hospital, King's College would stand alone among the General Hospitals. (Loud cheers.) Professor Bentley then proceeded to make a few general remarks, in which he urged the students to be methodical in the arrangement of their time; to take suitable exercise, regular and moderate rest; and to avoid all frivolous and dissipated habits; by which alone they could hope to preserve a "*mens sana in corpore sano.*" He also strongly recommended them to be regular in their attendance in the lecture theatre, for, he said, that there was no way in which the principles and many of the details of a science could be so readily and pleasantly acquired, as well as more vividly impressed as by diligent attendance at lectures. One circumstance he believed which had tended to bring lecturing into some disrepute of late years, was the practice which many students had acquired of taking very full notes of lectures. He thought that this was a great mistake, for if a student whilst attending a lecture had his principal attention directed to the book upon which he was simply recording the words of the lecturer, instead of to the lecturer himself with his experiments and illustrations, he necessarily lost the greater part of that which made lectures especially of value over a simple reading. His advice to the student, therefore, was to take notes only of the main points of a lecture, or at all events not to allow note-taking to interfere with his attention to the lecturer, and afterwards when the lecturer with his matter and modes of illustration were photographed, as it were, on his memory, to fill in the details by reading and thinking over the subject-matter of the lecture. In conclusion, the Professor said:—Let me affectionately admonish you, that whilst you are devoting yourselves to the pursuit of those branches of secular knowledge which is the business of your lives, not to forget that you have a still higher duty to fulfil—to prepare yourselves for a nobler and better world hereafter. Be regular, therefore, in your attendance at the College Chapel and at the Divinity Lectures. Let the great fundamental principle upon which King's College was established, "*Sancte et sapienter,*" be ever before you in all your actions and in every step of your lives. You have a great and noble Profession—one second only to that of the divine—one that will constantly bring you into contact with the dead and the dying—one, therefore, that, unless you are wanting in all the better feelings of humanity, must force you to think continually upon your ultimate destiny: however arduous may be your studies, therefore—however secular pursuits may require your attention—never forget that it is your first duty, your greatest privilege, as it will be also your greatest comfort, to ask God's blessing on all your undertakings. Be assured that, if you do so in faith, you will not only have your reward in this life, a foreshadowing of that which is to come, but unspeakable joys hereafter, when time itself shall be no more.

UNIVERSITY COLLEGE.

Professor Harley commenced by saying that philosophy had undergone an important change. Science had passed through a mighty revolution. The fanciful theories of alchemy had been replaced by the solid facts of chemistry, the transcendental views of astrology by the sober calculations of astronomy; and now a peculiar spirit pervaded the Medicine of the present day; Empiricism yielded her place to Reason; so-called Experience abdicated her throne to Learning, and just as the astronomy of the nineteenth rose out of the astrology of the sixteenth century, so was Rational Medicine rising

sphinx-like from the ashes of Empiricism. Medicine was now so far advanced that the principles upon which it was founded could no longer be said to rest upon mere conjecture and faith, but upon positive proof. Speculative philosophy had lost its influence on the human mind, and in its place had risen, and was every day rising, what had not inaptly been called positive philosophy. The cord which so long bound them to the metaphysical dreams of the middle ages was fast being gnawed asunder; men doubted where they once blindly credited, and inquired into what they formerly took for granted. They ceased to believe that causes of which they were ignorant originated in a supernatural agency, and no longer feared to affirm that health and disease were not governed by the spectre called "Vital Action." Vital action had been in Medicine what catalytic action was in chemistry, what ether was in physics—an imaginary principle, employed by ignorance to hide ignorance. It was, in fact, a name instead of an explanation—an imposition which positive science had detected and exposed. There were many things in nature which they could not explain; there were many things in Medicine which they did not comprehend; but he had no sympathy with those who preferred to impose upon their reason visionary agents, rather than feel that Nature's works were too great for them to understand. However much they had yet to learn, Dr. Harley believed that the intellect of man would yet solve the problem of organisation, and that the practice of Medicine would ere long rival any of the exact sciences of our times. Let them look for a moment at what recent physiology had done. Had it not given them a clearer, he might say a simpler, idea of what life was than they previously possessed? Had it not shown them, for example, that their limbs moved in obedience to mechanics; that the crystalline lens acted according to the law of optics; that their heart's action was within the comprehension of hydraulics, and that respiration, digestion, and absorption were performed on purely Chemical and Physical principles? In a word, recent physiology had pointed out to them that the phenomena of life were the effects of a combination of the natural laws which governed the universe at large. It had shown them that every organism in the possession of life, no matter whether it were at the bottom of the vegetable or at the top of the animal scale, was undergoing never-ceasing change, and that, notwithstanding the apparent stability of its frame, every particle comprising it was transient in the truest sense of the word. The appearance of corporeal identity which the living organism presented was only an illusion, for every day, every hour, every moment, its parts were wearing away. No movement could be made, no function performed, without a destruction of matter. Every breath he drew, every word he uttered, every thought, was accompanied by a metamorphosis of material. They could not at the present day entirely separate the psychical from the physical—the spiritual from the material. They could not tell the how, the when, or the why, a thought sprung into existence; but physiology told them, science told them, all nature told them, that a change in matter had accompanied the evolution of that thought, and that without matter the thought never could have been evolved. Well might they exclaim, "How wonderfully, how fearfully are we made!" Life was one perpetual state of death, and if to live was to die, so to die was to live, not only in a spiritual, but also in a physical sense. For what was the disorganisation of the dead animal or vegetable being but a change from death to life? Even life was everlasting—at least, the animal organism did not begin to live at the hour of birth, at the period of quickening, nor at the moment of conception. No; the life that was given to the ovum was transmitted by the parent, not generated. Indeed, there was but one creation of life, and from the beginning until now that same life had been handed down from parent to progeny in one uninterrupted chain; and that chain would last so long as the species lasted. The Physicians of to-day were neither conceited theorists nor proud empiricists, but humble seekers after truth, and ill did they merit the ignominious title of unbelievers which ignorance occasionally hurled at them. Were they irreligious because they read the book of nature and believed in astronomy, which told them that the sun did not move; geography, that the earth was not four-cornered; geology, that the world was not created in six days? Surely not. Was a machine less perfect because they understood its construction? Was man less the work of his Creator because they comprehended his organisation? On the contrary, far from destroying their feelings of veneration, a knowledge of Nature's laws but rendered them more acute by unfolding to them the immeasurable distance that separated the feeble works of man from the mighty works of God.

Dr. Harley afterwards said they had arrived at that state of advancement in Medicine that they had not only the power of initiating, but also at pleasure, of calling into existence certain diseases. Thus, for example, by injecting a few drops of alcohol into the portal vein they could give an animal diabetes; by puncturing a portion of the medulla oblongata albuminuria, or by pinching the vagus, palpitation of the heart; and not only could they produce these, the symptoms of disease, but even morbid changes themselves. Thus, by directly acting on the pneumo-gastric nerve, cough, dyspnœa, and increased bronchial secretion, could be induced on the one hand, and on the other the anatomical lesions of pneumonia and pleurisy. So, again, by exciting the solar plexus they could bring on diarrhœa and dysentery, together with the structural changes which habitually accompanied them. Nor was this all. They had it in their power to induce diseases of a more general nature, for with the aid of a drop or two of lactic acid they could call into existence rheumatism and heart disease, or with a little decaying animal matter bring on fever and death. Then again, as far as surgical diseases were concerned, there was scarcely one that they could not produce artificially, no matter whether it were a cateract in the eye or a stone in the bladder. In fact, the further they advanced the more clear did it become that man had it in his power not only to produce morbid symptoms, but even actual diseases with their complete chain of results. And, as regarded the treatment of disease, that was now no longer a happy knack acquired by accident in the field of chance. The physiologist knew the almost miraculous power he possessed in the Materia Medica. Astronomy had boasted of its wonders, but they were nothing in his (Dr. Harley's) opinion compared with the wonders of physiology. Whoever could have believed that the story of a dead heart could be else than a stage fiction? Yet, strange as it might appear, it was a scientific reality. The physiologist had it in his power, by means of two poisons (upas antiar and woorara), to produce the wonderful sight of a dead heart in a living body, as well as that of a dead body with a living heart. Now and then they met with men, even in the ranks of their own Profession, who said they did not believe in the power of remedies. Such men most probably began with exaggerated notions of the power of drugs, and by injudiciously employing them, failed in obtaining the expected results, and jumping to the opposite extreme, denied their use altogether, forgetting that their want of success might be due to the frailty of their knowledge rather than to the inefficiency of the medicine. Even with common remedies, what mighty effects could be produced. They could excite the brain to increased action with belladonna; they could lull it to repose with *cannabis Indica*. They could stimulate the motor nerves with strychnine, so as to throw all the muscles of the body into a fearful tetanic spasm; or they could paralyse them with conia, and render them flaccid as in death. They could hasten the rapidity of the bounding pulse with certain stimulants; they could slacken its speed with aconitine. In fact, they had it in their power to produce at pleasure almost every conceivable action and counter-action on the human body. Dr. Harley then added that, if they passed from the realms of physiology to those of pathology, and merely limited themselves to the consideration of what pathology had done regarding new growths, they would see with pride that even here Medicine had not lagged behind. The idea of a specific form of cancer-cell had indeed proved but an ephemeral dream; but the value of the microscope had been enhanced by the discovery that, with its aid, the accomplished histologist can predicate with almost unerring certainty the ultimate effects of the Surgeon's knife in the removal of morbid growths. Thus, for example, if, on microscopical examination, a tumour is found to have no resemblance to any normal tissue, but consists almost entirely of cells, nuclei, and nucleoli, we need have no hesitation in pronouncing it malignant. If, on the other hand, a new growth is composed of cells resembling the normal tissues in its neighbourhood, we may, with an almost equal degree of confidence, assert it to be innocent. Between these two forms of new growths there are an almost endless variety, and just in proportion as we find the structure of a tumour approaching nearer to the one or to the other form, are

we enabled to pronounce upon its degree of innocency or malignancy, and regulate our prognosis accordingly. Dr. Harley terminated his address with some admirable advice to the students, pointing out to them the necessity of nurturing a spirit of religion, as their success in after life would depend as much upon their moral as upon their mental qualifications. (Loud cheers.)

ST. MARY'S HOSPITAL.

The Medical School in connexion with this Hospital was opened on Tuesday se'nnight, when an Introductory Address was delivered by Mr. Spencer Smith, Surgeon to St. Mary's Hospital, and Lecturer on Surgery in that School. The Lecturer commenced his address by stating that he had been requested by his colleagues to explain to his audience the school prospectus in detail, and to call their attention to certain advantages peculiar to this Institution, more particularly than that document could be made to do for itself. He next adverted to the advantages students now possessed over their predecessors in the office of Dean, whom he styled as "essentially the student's fiend." He congratulated those before him on being connected with such a man as Mr. Gascoyen, the Dean of St. Mary's, one so well calculated to enlist their best feelings in the Profession, and not only able to advise, but at the same time affording the brightest model for their imitation. (Cheers.) This preliminary matter being cleared away, he said, they would naturally enough expect that his next duty would be to hold out the hand of fellowship to them, to welcome within those walls, as the portals of the Profession, all who had sought the Hospital, to congratulate them on the choice of a Profession, or, perhaps, to offer some advice as to the manner in which they should prosecute their studies, and the habits of industry, self-culture, and discipline, which each should practise who proposed to take upon himself, at some future time, the most serious responsibility of a Practitioner of Medicine. Their Professional studies, however, were all arranged for them; a well-considered and well-defined path was laid down already, and one which he earnestly advised them to follow closely, as admirably adapted to save them useless labour and reading, and to conduct them, step by step, in Professional knowledge, adding subject after subject in just that order in which they were made most useful to them in their studies, and in which they could best apply them. The body, as they would soon learn, was not necessarily nourished by what a man ate, but by what he digested; and the analogy held good with the mind. He thought, as a teacher in a public school, he was bound to take advantage of that public opportunity to tender his cordial thanks to the Board of Examiners of the Society of Apothecaries, for the part they took in years past in this particular, and to state his convictions that to them was mainly due the improvement in Medical education, and consequently in the general status of the Profession, which late years had made so manifest. They were the first to raise the character of the professional examination, and to lay down a curriculum of study in any way worthy of the student of a branch of science. If they were to pass away, and the Profession lose their valuable services in the education of the licentiates, all honour to them ere they went. But he must be permitted to express the confident opinion that the presence of their element was essential to the construction of any body which professed to deal with the education or interests of the General Practitioner, and that after their past services in that cause, it would be a shame and disgrace somewhere if they were not allotted a position in any board of examiners entrusted with similar functions. (Cheers.) Upon their course of study, therefore, he had nothing to offer. Upon the separate subjects of their studies in the Hospital he had as little to say, for they would be introduced to them in far more captivating and attractive terms by his several colleagues, each in his own department, than he could hope to place them before them. Should he then proceed to the last of the subjects he alluded to just now, and tender advice on the responsibilities of the career on which they were just now entering? No, that might be a duty presently, but before he could presume to offer advice, they must have some bond of union, some sympathetic tie must hold them together, and that was not yet completed. He stood, for the time being, most unworthily he felt, but still he stood in the doorway of the temple. They had not yet received so much as a welcome within its portals, nor dare he offer them one until he knew in what spirit they sought admission into it. Let them not misunderstand him. He addressed them in no spirit of pride or coldness. He loved the society, the enthusiasm, the aspirations of youth, and he would not for the world deter any one of his hearers from taking the steps which he now proposed to himself; but it was this very interest in them all, added to his solemn duty to his Profession which obliged him to call upon every one of them to examine himself conscientiously as to his motives for choosing the Medical Profession as his life-long occupation. "What can that signify to you?" many would think. To him nothing, as an individual, but to them it was everything; to them, according as they made choice of it in one spirit or in another, it would be noble and ennobling, or a source of life-long bitterness and vexation. He had introduced this subject, which at first sight might seem to be an unpleasing one, to them, because he had always felt confident that many or most of the so-called evils of the Profession which were so constantly heard of from the lips of grumblers within its ranks—such as the want of confidence on the part of the public, the low status assigned to the Profession in public society, the backsliding into various phases of quackery on the part of its members, the ill-feeling and low tone of conduct of professional men one to another, and the consequent wail for codes of Medical ethics (as if a man who did not feel his duty towards his neighbour could ever be made to do it by any moral law),—he said he had always felt confident that these and many other such blots upon the professional escutcheon were to be traced to the hasty or inconsiderate choice of the Profession as a means of livelihood. What had been the motive principle in their choice of this noble, honourable, and sacred calling? for so the wisest and best of men had designated it. Was it wealth? Was it power? Was it dignity—elevation among their fellows? In a word, was it Self? Was it selfishness in any shape? If so, he recommended them to abandon it, to give it up while yet they might. It would never repay them. It was the worst trade, and took the worst position as a money investment in the world. As to power, where were the Doctor's dependents? Whom could he influence? Upon whose shoulders was he to ride to it? For public dignity and position they might sigh in vain. The politician, the lawyer, the warrior would pass them by in that struggle, and not unreasonably. They served the public, conferred public benefits, while the Medical man's occupations, his struggles, his sacrifices were carried on in private, in the solitude and silence of the sick chamber. The deeds of the politician, the lawyer, the warrior affected the community at large—those of the Medical man for the most part affected it only through the individual member. Believe him, they were not the true and sacred motives for choosing the profession of Medicine. He fancied he thought he heard some of his young friends say, "But I have a true thirst for knowledge and love for science, and am willing to bring my best talents to bear upon this branch of it, and am I not to expect that my Profession will furnish me, in return, a subsistence?" Undoubtedly it would, but if that was all a Student brought to it, he would be one of the aforesaid grumblers by-and-bye, and would be heard declaring that if he had used the same amount of intellect and persevernace in any other occupation, he might have commanded such rewards as the world sets such store by. But he dare not dwell longer on that view of the picture, lest, as he said before, he made it unlovely in their eyes—the very opposite of his wishes and intentions. Let them give him their heads and hearts while he attempted to place the matter in another light. Let them listen to Francis Bacon, the spiritual father of modern science, to whose philosophy they owed Medical and sanitary science, and who owed his philosophy to his Christianity. "But," says he, "the greatest error of all the rest is the mistaking or misplacing of the last or furthest end of knowledge; for men have entered into a desire of learning and knowledge; sometimes upon a natural curiosity and inquisitive appetite; sometimes to entertain their minds with vanity and delight; sometimes for ornament and reputation; sometimes to enable them to victory of wit and contradiction; and most times for lucre and Profession; and seldom sincerely to give a true account of their gift of reason to the benefit and use of men; as if there were sought in knowledge a couch whereupon to rest a search-

ing and restless spirit; or a terrace for a wandering and variable mind to walk up and down with a fair prospect; or a tower of state for a proud mind to raise itself upon; or a fort or commanding ground for strife and contention; or *a shop for profit and sale; and not a rich storehouse for the glory of the Creator, and the relief of man's estate.*" Here, then, was the true motive principle declared. Theirs was really to be "a calling." They were to study our branch of science (art if they liked) with a view to become God's ministers to their fellow-men in their darkest hours of pain and distress. They were to become appointed agents between their Creator and their fellow-men. They were so to gain knowledge, that, with it, they might better perform their duty to their Maker and their neighbour. And what a splendid prospect did this view of their noble art open to them. Could privilege be greater? What rich rewards, what true happiness, fully, nay more than compensating for the loss of wealth and worldly honours; for the Doctor had his rewards and abundant excitement of a noble and truly heroic character. What a great privilege for him, that while others had to seek opportunities of charity, to make sacrifices of time in finding fit objects, and so on, his whole life was one round of daily exercise of true charity, patience, and sympathy. If his duty, as he had said, was not with the public, and did not therefore, conduct him to public rewards, yet he was repaid in the private estimation of his patients. Who so loved, so respected, so trusted as the Physician? Who in the whole range of society held such an intimately close relation to his neighbour? They were confided in for a thousand reasons too numerous to mention—their aid was sought in the dark hour of sickness and suffering, and when all hope was past, and known to be so, the stricken fellow-creature still clung to the Doctor for sympathy, although he could offer no hope and afford no relief. His very presence, and the assurance from his own lips that nothing could be done, was constantly found to be a mighty relief to the suspense of the bed of death. But was that all? Was there no field in their Profession for scenes of greater excitement which might assimilate with the powers and age of the Students? Let them think upon the tremendous responsibilities of the bed-side confidences poured into the ears of the Profession: the position of individuals; the honour of families entrusted to them. And was there no field for heroism among them? Where so much? Did the warrior monopolise true courage? Certainly not. He (the Lecturer) honoured him, and would not detract one iota from his position. But it was said by those who had been in actual warfare that the very universality of danger took away all power of realising individual risk. How different the position of him whose daily course of duty lay in fever districts in times of epidemics, or in the over-crowded fever wards of Camp Hospitals! And they had their heroes too. Who would draw back from the fraternity of which the immortal Harvey, Hunter, and Jenner were members? Who would not rather claim kindred with them than with the greatest politician on the roll? Yet how different their reputation in the world. Who ever heard of Harvey out of the Profession? How little did men estimate his great discovery, or its influence on the very science to which they nevertheless looked every day for aid and comfort. On the other hand, the name and fame of Newton was well known and appreciated in every village-school. But so, he had already said, it must be; such men worked before the public. The public saw and felt its interests in them, and rewarded them. Medical men must be content to labour in a very small circle; but let them not be disheartened, the land, the world, was well nigh covered with their tiny spheres, and they were doing good work. But who was envious? Who would not rather have been Jenner than the highest statesman or warrior of his age? Of them opinions might always differ as events changed, but his fame was beyond dispute. There could be no doubt of his services to mankind. Warriors and statesmen might for a time have benefited a nation or a people: he reckoned his debtors by millions; nay, the habited globe blessed his memory. And yet quite lately few persons were with difficulty found to defray the expense of the first public memorial to him, while the bones of the immortal discoverer of the circulation of the blood were lately proved to be so neglected, that they might have become the prey of any itinerant showman who might choose to remove them. But above all these incentives to the right choice of their Profession as an honourable means of subsistence, he held there was a yet greater. It was the only calling, when practised on the views he had insisted on, regarded in the true Baconian light, on which, as he conceived, a man could honestly ask his Maker's blessing day by day. He knew that he was on delicate ground. He might make comparisons, but he had no wish—he had no right to do so. They were there to deal with their own Profession, and need not travel beyond it for material for illustration. But, looking at what was going on around them daily in other Professions and occupations, the gradual lowering of tone and principle in some, the uprooting of fixed principles in others, he thought the man who desired to live a useful life, in constant communion with, and in strict obedience to the dictates of the still small voice within him, could not serve his neighbour and his Maker better than in the Medical Profession. The lecturer proceeded at some length to advise the Students as to their conduct while pursuing their career, and was loudly cheered.

GROSVENOR-PLACE SCHOOL OF MEDICINE.

Dr. Webb commenced his Lecture by impressing on the Student the necessity of work, as the only source from which he could hope to obtain success. The method and manner in which he should prosecute work were then adverted to, and some general recommendations given as to the direction and training of his mental powers. The subjects of his studies were next reviewed. The only true foundation of rational Medicine is biological science, the science of life in its widest sense. Various illustrations of the bearing of the different branches of the life sciences on practical Medicine were adduced; among others, the connexion of comparative anatomy and zoology with Medicine was thus illustrated:—But need we go far to prove that some knowledge of comparative anatomy may be an essential to the true understanding of disease? I think not. A short time ago, in a country district near Dresden, several persons were taken ill with rheumatic and typhoid symptoms, and one woman became gradually worse and worse, more and more emaciated and weaker, and at length was removed to Dresden, and placed under the care of Professor Zeucher. There she died. No apparent cause was present to account for her muscular weakness and pain, her emaciation and death. But her body was dissected, and it was noticed, on examining with a magnifying glass, the muscular tissue which was every where atrophied, that it was covered with minute spots. These spots were separated, and their anatomical structure proved that each spot was an encysted entozoon, known to naturalists as the *Trichina Spiralis*. The woman's body was full of them. Did this cause her death? And if so, how were these entozoa introduced? Or was their production an instance of spontaneous generation? Subsequent inquiry and experiment answered all these questions. Virchow took a portion of the woman's muscle, and mixing it with other food, fed rabbits with it. In five or six weeks the animals died, weak, emaciated, just as the woman had done; and on examination their muscular system was found to literally swarm with the same parasites. The source of the mischief was eventually traced to the flesh of a pig, which had been killed, cured, and eaten in the district, the woman having been one of the partakers, for it was found that the hams and sausages contained a large number of *Trichinæ*. Now the discovery and the recognition of the entozoon, and the subsequent experiments undertaken in consequence of its recognition, did not, it is true, furnish a clue to the cure of the disease, but they furnished an infallible guide to its prevention. For they proved not only the parasitic nature of the disease, but that the entozoon was introduced from without, that it was introduced, like many other *Helmintha*, through the medium of flesh containing the living organisms; and it pointed with numerous facts of the same kind to the necessity of exposing animal and vegetable substances to a sufficient degree of heat to destroy the vitality of any organism they may contain before they are used as human food.

The lecture concluded with a view of the dignity of Medicine and the responsibilities she entails. The dignity of Medicine is

commensurate with the dignity of the being who is the object of her care. Man possesses another nature besides the physical, a nature which acts and reacts upon his lower organization, modifying its processes, energizing its activities, and regulating its powers, endowing it with an importance in the life circle of this planet to which by its intrinsic structure it has no claim. The psychical nature of man which enables him to know himself, and to recognise, however dimly, from his works, the attributes of the Author of his being, is so inseparably connected with his animal life, that a recognition and acquaintance with it is allowed to be indispensable to the human physiologist, and forms a necessary part of the knowledge which you as Physicians must possess. It is in his psychical endowments alone that the dignity of man consists. The possession of an immaterial indestructible principle controlling his bodily actions, and by their aid organic and inorganic nature, is the sole real distinction between himself and the lower forms of life. In his anatomical structure man can only be considered as a mammal distinguished by the large size of the encephalon. But even the larger quantity of nervous matter in his organization constitutes only a difference of degree. Recent investigations have demonstrated that every essential part of the human brain has its homologue in the brains of the higher apes; and with regard to other structural differences, they, for the most part, only evidence the adaptation of the vertebrate skeleton in him to the erect position. It is not on these low insignificant differences that the dignity of man as master of the lower creation, and the only terrestrial being capable of rendering reasonable service to the Creator depends. It is true, however, that all physical science points to the high position which he is destined to hold. Consider for a moment the relations which inorganic nature and life, past and present, bear to his destinies. He, the last appearance on this planet, the surface of which ages had been preparing for his reception. Rivers, mighty in their ceaseless action, had washed for him the soils of continents and mountain-ranges, and deposited through indefinable epochs their treasures on ocean shores, that the rich alluvial soil might form the cradle and support of his industry. Vast primeval forests had grown, and fructified, and died, to supply him the means of spreading commerce, art, and science, over the planet of which he is highest denizen and lord. Myriads of simple organisms had lived their little span of enjoyment, died, and—converted into stone—have yielded him the material for his lofty architecture. The Great Pyramid of Egypt is composed from strata of limestone formed by aggregations of Nummulites; and the proud capital of modern France may be said to be constructed of the minute and complex shells of countless Foraminifera. His advent was heralded by huge mammalian forms, which cleared before him a way into the thicknesses and solitudes of primal vegetation, and fertilized the soil which was to yield him sustenance. They have passed away, and been replaced by other species more fitted to his wants, and to convert for him the simpler products of the vegetable world into higher and more nutrient aliment. The Mighty Artificer whose creature he is, and to whom he shall return, has placed at his feet all the treasures of material affluence, all the powers of organic nature. Lord of all, he alone is the vice-gerent of his Maker, the head and frontispiece of the results of his creative energy. This being ennobled by the faculties of his intellect, ennobled by the power of holding communion with Supreme Intelligence, ennobled by the subserviency of all inferior creation, ennobled by his future destiny, is to be committed to your care. The responsibilities of Medicine are only equalled by its dignity. Never, for one moment of your career, lose sight of the intrinsic value of each human being—man, woman, or child—who applies to you for assistance. Your lot may be cast in the crowded hives of human industry, or you may minister to the defenders of your country by sea or land,—it may be your destiny to stand before nobles and the rulers of the earth, or in lowly workhouse or Hospital ward to pursue your beneficent calling Still, in all places and under all circumstances remember the dignity and responsibilities you, by your Profession, have inherited. I tell you not of material preferment, of titles, rank, or fortune. *Dat Galenus opes* is a maxim the truth of which is of limited application in the present day. But I tell you of higher rewards. I tell you of the pleasure of investigating the material universe, wresting from it its secrets, and compelling it to yield them to the service of your race. I tell you of the high enjoyment you will receive from analysing the thoughts of the Supreme, and by comprehending them, drawing closer the cords of love and reverence which should ever bind the finite to the Infinite. I tell you of the purest gratification of which our nature is capable, of the enjoyment of alleviating human suffering and pain, of soothing the pangs of infancy, and healing the wounds which manhood receives in its ceaseless contest with external circumstances. I tell you of the happiness derived from the gratitude of your fellow-men, the blessing that shall reach you from the prayer of him that was ready to perish. I tell you of the enjoyment to be obtained from a career of noble toil and stalwart industry. And, higher recompense still, I tell you pursuing Medicine with the aims and intentions I have endeavoured to pourtray, with a just conception of the dignity of your calling and the responsibilities it entails, that ever, amid your days of toil and nights of anxiety, a voice, soft and still as that which reached the seer of old amid the rocky fastnesses of the Syrian mountain cave, shall whisper to your inmost consciousness, "Forasmuch as ye have done it unto the least of these little ones, ye have done it unto Me."

ORIGINAL COMMUNICATIONS.

ON THE DIAGNOSIS AND TREATMENT OF INTRA-UTERINE POLYPUS.

By ROBERT GREENHALGH, M.D., M.R.C.P. Lond.
Physician to the Samaritan Hospital.

Few additions have been made to our knowledge in the diagnosis and treatment of polypus of the uterus since the publication of Dr. Gooch's valuable treatise on that subject, except as regards the minute anatomical structure of these growths; but it is now generally admitted, contrary to the opinion of that eminent authority, that the removal by the knife is far preferable to that by the ligature, which is not only more tedious, but renders the patient liable to the dangers of purulent infection. There is yet another method which appears to possess all the advantages without any of those drawbacks usually attributed by authors to the foregoing operations; I allude to the use of the écraseur, which upon further trial will, I think, be found eventually to supersede all other procedures. Dr. Ferguson in his excellent commentary on Gooch's Essay when alluding to this appliance states, "that judging from the mechanism of the instrument it must be applicable only in the cases where the stalk is easily reached." That such a fear cannot reasonably be entertained is clearly demonstrable from the following case, which has recently occurred in my own practice, in which not only was a polypus of the fundus uteri safely removed by that instrument, but it was found more manageable than the ligature or polyptome, to both of which a fair trial had previously been given.

On the 19th of last July I was requested by Dr. Wildbore to see Mrs. W., aged 35 years, married, of fair complexion, and dark hair and eyes, who presented a very bloodless aspect. She stated that at the age of 15 years she commenced to menstruate regularly, painlessly, and somewhat profusely, the discharge was bright in appearance, never coagulated, and usually lasted from eight to ten days, with an interval of three weeks. When about 16 years old, she became for the first and only time pregnant, during which condition she was frequently threatened with miscarriage, having had repeated attacks of hæmorrhage, for which she was freely bled without any good result. At the completion of the seventh month she gave birth to a still-born child, followed by a very moderate loss of blood. Her nose would frequently bleed on the slightest cause. She enjoyed excellent health up to the age of 29, when she began to suffer from almost constant discharges of bright, and frequently coagulated blood, which sometimes became alarmingly profuse, and rarely left her for more than three or four days at a time.

Although she experienced no actual pain, weight, or bearing down, still she was frequently annoyed by a sense of discomfort about the loins and lower part of the back, which was much increased by any excitement. These symptoms becoming aggravated and greatly interfering with her strength,

she was induced, about five years and a-half ago, to consult an eminent Accoucheur, who, after a careful vaginal examination could detect no disease of the womb, and ordered the usual remedies for the arrest of hæmorrhage; but experiencing little and only temporary relief, she sought the advice of some of the most celebrated Accoucheurs in this country and abroad, but without deriving any permanent benefit.

Latterly, she had given up all treatment, under the impression that the disease, whatever it might be, was incurable; until recommended by Dr. Wildbore to place herself under my care. On making an attentive vaginal examination, I found that canal extremely small, the os and cervix uteri high up and tilted upwards and backwards, the body being considerably anteverted. There was no undue heat, dryness, throbbing, or tenderness of the parts. The sound, which was introduced with difficulty, and only after being much curved, passed upwards and forwards to the extent of five inches and a-half, clearly showing that the uterus measured internally three inches more than the normal size. I at once suspected that there was an intra-uterine polypus, and ventured to express an opinion to that effect. I advised that sponge-tents should be introduced into the os and cervix uteri, so as to enable me the better to explore the interior of that viscus. On the 25th of July the first was introduced, and on the 28th, after the removal of the third, which had fully dilated the os and cervix uteri, I was enabled to detect a polypus attached to the fundus, around the pedicle of which I succeeded, after much difficulty, in passing, by the aid of Gooch's canula, a ligature, which unfortunately broke during the process of tightening. Having been foiled in this attempt, the parts being somewhat tender, and there being no urgent symptoms, I determined to delay any further manual interference for a few days, and ordered repeated doses of infused ergot of rye, with the hope that the polypus would descend within easy reach; such, however, was not the case. I therefore decided, with the concurrence and valuable assistance of Dr. Wildbore, to make another attempt to remove the growth.

On the 10th of August, after the withdrawal of a second sponge tent, I could pass my finger freely into the uterus when I traced the pedicle of the polypus, which was broad, and firmly attached to the fundus. Having secured the growth as high up as possible with a hook, gentle traction was made by my friend, while I directed the chain of the écraseur anteriorly, the convexity of the instrument passing posteriorly into the uterus. The chain being gradually and carefully tightened without causing any pain, I proceeded slowly to strangulate the growth which came away without the slightest hæmorrhage or pain in a quarter of a hour after the adjustment of the instrument. The polypus, of fibrous form, with a broad pedicle, measures two inches and a-half in length and about three quarters of an inch in diameter. With the exception of a slight abrasion about the os uteri which has been cured by the application of nitrate of silver, this patient has recovered rapidly and without one unfavourable symptom.

The interior of the uterus measures at present (August 23) about one and a-half inch more than the normal standard.

76, Grosvenor-street.

A SEVERE CASE OF COMPOUND COMMINUTED FRACTURE OF THE UPPER THIRD OF THE TIBIA.

By JOHN GRANTHAM, F.R.C.S. (Hon.)

On June 11, 1860, a man, aged 72, received an injury, viz. a most extensive comminuted compound fracture of the right leg of not less than seven inches of the upper third of the tibia, attended with contusion and laceration of the surrounding structures, with hæmorrhage, both arterial and venous. The fractured portions of bone extended to within half an inch of the knee-joint. There was a long spicula of bone which nearly penetrated the skin at the lower end of the fractured tibia. Of such a nature was the injury, that had the patient not been at so advanced an age, and whose habits had not been quite temperate, I should have strongly enforced the necessity, or rather the positive duty, of *immediate* amputation of the limb. The treatment which I adopted consisted in replacing the fracture of the limb, and suspending it according to the method I had published in the *Medical Gazette* in 1832—being an improvement on the mode proposed by M. Sauter, of Constance—the board being made to revolve on its axis with an attachment by the ends of the four ropes joined to one point and hung from the ceiling of the room, representing the action of the universal joint (ball and socket); the application of water dressing, beer poultices, etc., to the wound, and strict attention in maintaining the general health. By this treatment, which I have been adopting during the last thirty years, I again observed the immense advantage pertaining to the principle of suspension. It enabled me to dress the wound without any disturbance of the limb. It allowed the patient to evacuate the intestines without interfering with the injured parts, and permitted him to move, freed from pain, from one side of the bed to the other, and was the means of preventing the effects of any jar or concussion from any accidental circumstance. The simplicity and advantage of suspension is explained by regarding the hip-joint as one "ball and socket" joint, and the attachment of the four ropes as the other ball and socket joint. Between these two points the injured limb is suspended in mid-air, thereby preventing any movement of the fractured bone by concussion; and apart from spasmodic action of the muscles, must rest where the Surgeon places the limb. I make no apology for thus repeating this statement, as I learn that this simple application is yet damaged by the addition of a cradle or frame-work resting on the bed, and the non-attachment of all the ropes to *one point*. I cannot but regret as having been the means of introducing the treatment of fractures of the leg by suspension into England, to observe so simple and useful a principle of mechanics so stultified by the machinery which has been added to it.

Union of all the portions of bone excepting a long sequestrum of bone above stated, was effected in eight weeks; but in consequence of the severity of the shock to the system, and discharge, both sanguineous and purulent, from the wound, and the great age of the patient, there was such an amount of loss of general muscular power as to disable him from walking without the use of crutches, until about four months from the time the injury occurred, after which time he could walk with slight aid for two or three miles. I ought to observe, owing to the proximity of the fracture to the joint, the knee-joint was left nearly anchylosed. (As is often the case when an accident occurs, other Medical men are sent for in the hurry of the moment, he was seen by two other Medical men besides myself. After I had adjusted the parts and put the limb into a proper position, the second Medical man who came to him, not content with asking a few questions, actually removed the dressing from off the wound, thereby allowing, or rather causing, a return of the bleeding, observing, "The blood is pumping away from the leg!" Such an act needs no comment from me.) The patient was at this time in the perfect enjoyment of health, attending to his affairs; still the loose sequestrum of bone was attached and did not come away, or at least, it was not altogether detached. Knowing his temperament, and also regarding the great principle in Surgery, to let the law of bone remove bone that is destroyed, as has been experienced in necrosis, I strongly urged him to wait, although it might be a year or two, so that the fragment of bone became so loose as to be thrown off by Nature's own law, and not interfere with the process of exfoliation. The above observation I made to the patient when I left off visiting the case, which was seven months from the occurrence of the accident.

Some time after I had taken my leave of the patient, to my surprise, I learned that he, a man possessed of upwards of £1000 a-year, was admitted in March, 1861, into a London Hospital and underwent the operation of having the sequestrum of bone removed. Pyæmia followed the deed; the patient died on the seventh day. This act requires some comment. Surely it behoves men who are in such a position as teachers of Surgery to be exceedingly cautious in not breaking a principle of practice in Surgery, be he or they ever so much importuned by the patient; as all authorities agree that a sequestrum of bone should be left as much as is possible to the unaided efforts of Nature for its removal.

This case is written with the intention of pointing out the one great fact of the powers of advanced age in repairing an extensive injury; also of advocating the necessity of maintaining

our principles of duty with honour intact; therefore I have suppressed the name and place, and relate the circumstance as a simple narrative.

Crayford, Kent.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

Assistant-Physician to the Metropolitan Free Hospital.

A SURGICAL REPORT OF THE

CASES ADMITTED INTO

UNIVERSITY COLLEGE HOSPITAL,

FROM THE LATE ACCIDENT ON THE

NORTH LONDON RAILWAY.

By Mr. GANNON, House-Surgeon.

Patients under the care of Mr. MARSHALL, acting for Mr. QUAIN.

(Continued from page 349.)

Case 11.—*Fracture of Sternum—Fracture of Ribs—Scalp Wound—Paraplegia—Recovery.*

Charles C., aged 43, signal-man, admitted Sept. 2, on account of injuries received in the railway accident.—1. Fracture of sternum in two places. Breathing very oppressed and laboured; at the end of each inspiration the fragments can be felt to separate. 2. Scalp-wound about an inch and a-half in length, extending transversely over centre of parietal bones; no bone exposed. No head symptoms. Pupils act well. 3. Fracture of ribs on left side—fifth and sixth. 4. Loss of power in lower extremities; no fracture of pelvis or injury of spine to be detected. On admission he was in a state of extreme collapse; surface and extremities cold; pulse weak. Ordered hot water to feet; and brandy internally. A broad piece of plaster was applied round thorax, and over that a broad bandage. After two or three turns of the bandage patient became faint; its application was therefore discontinued. Urine drawn off contained no blood. 3rd.—Patient passed an extremely restless night; breathing very laboured. He seems, however, to have recovered altogether from the shock; is now unable to pass his urine; when drawn off, it contained no blood. Loss of power in lower extremities still continues; motions pass involuntarily. Complains of pain in lumbar region on both sides; has taken a little food during the day. 8 p.m.—Pulse much fuller than in the morning; breathing, however, continues very distressed. Ordered, tinct. opii, ɱxxv. statim. 4th.—Has slept but little during the night; breathing difficult; percussion-note good over whole chest to extreme back; respiration louder in left than right, normal in character; inspiration, jerking, abrupt; expiration accompanied with a snore; during inspiration crepitation can be felt over lower two-thirds of sternum, and at left nipple; surface cool; pulse feeble, 112; pain in left side increased by coughing and moving arm; skin clammy; perspirations; tongue moist and white; urine drawn off acid. 7.30 p.m.—Pulse 102, rather fuller; breathing easier; ordered ℞ Mist. effervescens, ʒjss. sextis hôris. 5th.—Pulse 118; respiration 40, difficult; motions still pass involuntarily; sensation of legs impaired; cannot feel when outer sides of feet or outer halves of soles are touched. Can feel inner half of soles of feet, and also inner side of feet. Motor power entirely lost. States he feels as if the pelvic bones are separated. Urine drawn off, acid. 9 p.m. Pulse 112; respiration 39; cold clammy perspirations; ordered ℞ Hyd. chlorid. gr. v., ext. hyoscyam. gr. iij., Ft. pil., ij. statim, and add ammon. sesquicarb. gr. iij. ad mist. sextis hôris. Urine again drawn off. 6th.—Has slept pretty well at various times during the night; has a feeling as if mice are crawling from his feet to his hips, more marked in left leg (formication). Pulse 112, small, regular; respiration 40; says his breathing is not so easy; has a sense of tightness across his chest. Perspiration not so profuse; urine acid; add haust. spt. ammon. aromat. ɱxx. pro. sing. dos. 7.30.—Pulse 114; respiration 40; little more tendency to perspiration than in the morning; examined this afternoon by the Coroner, and under the influence of stimulants bore the fatigue very well. Urine acid. 7th. 9.30. a.m.—Has had a good night. Perspirations still continue; tongue moist, coated; pulse 108, small; respiration 39; breathing better; motor power in lower extremities a little improved; sensation about the same; no power over sphincters; tibialis anticus and extensor muscles of toes act slightly, but those of calves do not. Formication holds on; says he feels as if there was a weight on shin of left leg, and when it is touched this sensation runs upwards to hip-joint, and when latter is touched, to loins. The sensation of pelvic bones being separated is lost; urine acid; felt the catheter pass which he has not hitherto done. 7.30. p.m.—Pulse 100; respiration 40; urine acid. 8th, 10 a.m.—Feels rather better, but complains of soreness on left side of thorax, which is increased by pressure. Resonance over whole chest good; pulse 100; respiration 40, deeper, not so jerking. Says he has a desire to pass water; this desire is felt at end of penis (glans), and in region of neck of bladder, the intermediate parts being void of sensation. Legs about the same; no pain in back; urine drawn off, alkaline, but does not smell ammoniacal. A small bed sore is commencing on left buttock, he has therefore been placed on a spring bed. 4 p.m.—Urine drawn off; alkaline and strongly ammoniacal. 8 p.m.—Pulse 100; respiration 44. Felt a considerable amount of pain across loins; urine strongly alkaline, and contains a quantity of mucus; bladder was injected with warm water; ordered to discontinue mist. effervescens., and to take the following:—℞ Acid. nit. chl. ɱxx., tinct. gentian. ʒij., aquæ ad ʒj. Ft. haust., sextis hôris; and an additional quantity of brandy if necessary. Diet—eggs, beef tea, and brandy, ʒviij. per diem. To increase his anodyne dose (tinct. opii. ɱxxv., which he has taken every night since admission,) to tinct. opii. ɱxxxv. 9th, 10 a.m.—The patient says he feels better; urine was drawn off at 1 a.m. and 7 a.m., intensely ammoniacal. Has not slept well, owing to the frequent calls to make water; he states that it would come a certain distance and then roll back again. Pulse 100; respiration 38. 1 p.m.—Urine drawn off, and bladder injected with the following: ℞ Acid. hydrochlor. dil. ɱxv., tinct. opii. ɱv. Ft. injectio. 10 p.m.—Pulse 108; respiration 42; complains of thirst; seems a little distressed, owing to being moved; bowels have acted freely, he was, however, unconscious of the act; a great deal of wheezing at the chest; has a slight cough, but does not expectorate anything. Ordered to give up mixture of yesterday, and to take the following: ℞ Liq. ammon. acet. ʒij., vin. ipecac. ɱiij., spt. æther tinct. ɱxx., aquæ ad ʒj. Urine drawn off this evening, and is found to be still alkaline. 10th, 10 a.m.—Pulse 97; respiration 36. The draught ordered yesterday has had the desired effect of producing expectoration, which is of a viscid, glairy mucus. Sensations in lower extremities about the same; a decided improvement in motor power; urine drawn off alkaline and ammoniacal; bladder injected with warm water and ℞ Acid. sulph. dil. ɱxv., tinct. opii. ɱx. Ft. injectio. 4 p.m.—Urine was drawn off, not so ammoniacal, and of better colour than this morning. 9 p.m.—Pulse 96; respiration 36, complains of cough being troublesome. Ordered, mustard poultice to front of chest; urine clear and strongly acid. 11th, 10 a.m.—Pulse 94; respiration 36; deeper; thorax is acting more; abdomen less than heretofore; cough more troublesome; expectoration more copious, consists of frothy mucus; slept pretty well during latter part of night; motor and sensory power decidedly improved; urine drawn off during the night, alkaline and ammoniacal, but much less mucus; bladder washed out and injected as yesterday. 12th, 10 a.m.—Pulse 96; respiration 32; skin cool. The patient says his cough is still very troublesome, but expectorates more freely; expectoration thick, tenacious mucus, studded with dark specks. Can tell when first, second, and third toes of left foot are touched, and can distinguish them, but has no feeling in two outer toes; inner half of sole of foot sensible, but outer half still insensible. Can only tell when big toe of right foot is touched; has no feeling in outer four. The same is true of the sole of this foot, as of left. Formication gone; feels a sensation of heat and cold alternately in legs and at

intervals this extends to lumbar region. From the first there has been loss of power over extensors of ankles, but this has slightly improved. Feet are not so everted. Can raise legs one at a time a short distance from bed. Flatus passes involuntarily; bowels not opened for the last day or two; during the night urine, when drawn off, was alkaline and very ammoniacal, and contained a good deal of mucus. When drawn off this morning is found to be acid, so bladder was not injected with the usual injection, warm water only being used. 9 p.m.—Pulse 92; respiration 30. Says he has had frequent attacks of wheezing at the chest, which distresses him for a time, and then pass off. 13th, 10 a.m.—Pulse 90; respiration 28, deeper. Slept well, although cough troublesome; motor power of legs continues to improve; is able to rub one leg against the other; sensation a little better; does not feel the hot and cold sensation in legs, but they are warmer, and keep at a uniform temperature; has some power over bladder; he can force some urine through the catheter; urine drawn off in the night and this morning, alkaline and very ammoniacal; bladder injected with the acid and opium solution. 9 p.m.—Pulse 100; respiration 28. 14th.—Pulse 104; respiration 28; cough easier; slept pretty well; can cross left leg over right, and is able to extend foot better; has not quite so much power over right leg; has had a few twitchings in legs; feels as if they were in hot water; bowels open by an enema. Says he passed a little urine spontaneously after some straining; drawn off in morning and afternoon, alkaline and containing a little mucus. 21st.—Since last note patient has been slowly improving; lumbar pain has now entirely gone; is able to bend both knees, lift legs from bed, and cross one over the other; sensation of whole of foot is now perfect; urine still obliged to be drawn off; motions pass involuntarily; breathing much relieved; complains of no pain in chest; the distinct click heard with each inspiration from fractured sternum has disappeared; urine, alkaline; bladder injected on alternate days with the acid and opium injection.

Case 12.—*Scalp Wound and Scalds—Severe Injury to Left Thigh—Death—Autopsy.*

George Henry B., aged 22, stoker, admitted on Monday, September 2, at nine p.m., the evening of the accident. On admission were found—1. A large scalp wound, about three inches in length, over left eyebrow, with exposure of bone; no fracture to be detected. 2. A severe scald, extending from lumbar region down both thighs, back and front—the front, however, being the more implicated—to knees. There were also scalds on both calves. 3. A wound, about two inches in length, on inner and back part of the left thigh; the finger could be passed in for some distance in a direction upwards and outwards. The wound was filled with coke and other foreign matters. There was also a wound about an inch below the left trochanter, with some undermining of skin, especially upwards, in which direction a probe passes towards the great trochanter. The patient was conscious, although suffering from a great amount of shock; extreme pallor of face, extremities cold, pulse small and weak. The scalp wound was brought together with sutures and strapping; wound on thigh dressed with water-dressing; scalds with carron oil and cotton wool. Ordered hot water-bottles to feet, and brandy internally. 2 a.m.—Patient much improved; is able to answer questions rationally; complains of great pain down left thigh; chest examined, nothing abnormal. Ordered tinct. opii ɱxx. statim. Tuesday, September 3, 10 a.m.—Patient still improving; complains of having a good deal of pain over region of wounds on thigh; no pain in head. Pulse much fuller. Slept for three or four hours during night. Warm water-dressing applied to wounds on thigh. Scalds dressed anew with carron oil and cotton wool. 10 p.m.—About the same as in morning; has taken some food during day; seems to have recovered from shock. Pain down thigh a little relieved; skin cool; pupils act equally under light; extremities warm; wound on head doing well. Ordered tinct. opii ɱxx. statim. 4th, 10 a.m.—Patient rather drowsy, and wandering at intervals. Wounds on thigh look sloughy; the whole thigh is swollen, tense, and brawny. Ordered poultices to wounds, and hot fomentations to thigh; scald dressed as before; scalp wound doing well. Bowels open under influence of purgatives. Passes water freely; has no pain in head; pupils act equally; takes his food pretty well. Pulse 140. 7.30 p.m.—Much worse this evening; marked wandering delirium. Pulse rapid, small, weak, and cannot be counted. A probe passed into opening at posterior part of thigh, detects denuded bone. Crepitation to be felt about wound on outer side of thigh; the whole thigh is still swollen, and in a brawny condition. Foot warm; pulsation in tibials good; no swelling of leg or foot. Ordered: Mist. spt. vini Gallici ʒij. secundis hôris, and pulv. opii gr. j. sextis hôris. 6th.—Patient died at five a.m.; was perfectly unconscious for some hours previously. *Post mortem, ten hours after death.*—Head: wound over left eyebrow extends through occipito frontalis muscle, through pericranium to bone; no fracture to be detected; membranes of brain quite natural, also brain itself. Thorax: normal quantity of fluid in pericardium. Heart healthy; no fluid in pleuræ; at posterior part of left lung, near base, is a currant-jelly mass (pulmonary apoplexy), elevated, hard, about size of a half-crown; with exception of this, both lungs are perfectly healthy. No fracture of ribs or sternum. Abdomen: all organs are healthy; no ulceration of duodenum; no fracture of pelvis. Left thigh: on back skin has a gangrenous appearance; crepitation can be felt all over it, from lower border of gluteus maximus to knee. The skin and cellular tissue are separated from the muscles in nearly the whole extent. The adductors and ham-string muscles are separated from each other. The instrument with which the wound on inner side was inflicted, has completely divided the semi-membranosus (the cut extremities being retracted), has nearly torn through semi-tendinosus and long head of biceps, and has laid bare, and chipped a piece of bone out of femur just below the insertion of quadratus femoris muscle. The adductor longus, magnus, and brevis, the vasti and hamstring muscles are at seat of injury, and for some distance around, reduced to a pulpy mass so as to be scarcely recognizable. The sciatic nerve does not appear to be injured, neither do the vessels of the limb. The two wounds do not communicate.

Case 13.—*Scalp Wound and Fracture of Rib—Death—Autopsy—Linear Fracture of Skull without Depression, and Extensive Injuries to Brain.*

Benjamin R., admitted at 9 p.m. on September 2. Patient was in a state of extreme collapse, being entirely unconscious. Surface and extremities perfectly cold. On examination were found:—1. A scalp wound over left forehead, three inches in length. 2. Another over occipital bone, about an inch and a-half in length; bone exposed in both places. 3. A small superficial wound under left side of lower jaw. 4. Ecchymosis of left eye-lid. 5. Fracture of fifth rib on right side. 6. Severe bruise over upper part of sternum. No fracture of skull to be detected. Scalp wound was brought together by a couple of points of suture and strapping applied; from this wound (left forehead) there was a good deal of hæmorrhage, which was controlled by pressure. Ordered hot bottles to feet and brandy. Pupils act equally. Tuesday, September 3.—Patient remained insensible during the night, although his condition has somewhat improved under influence of stimulants. Is now conscious at intervals. Passes his water freely. Pupils act. His breathing seems very much distressed, and on examination there is found some emphysema, about a hand's breath over seat of fractured rib, confined to lateral region of thorax. A broad bandage was applied. 10 p.m.—Patient a little improved; has taken some food during the day. Bowels have acted under influence of purgatives; complains of no pain; breathing laboured; emphysema has extended to middle line of sternum, and backwards to posterior fold of axilla. September 4.—Has passed a restless night, although he had tinct. opii. ɱxxv. Tongue brown and dry; pulse very quick, small, about 120; respiration very difficult; clammy perspiration; pupils rather dilated, but act under light. 3·30, note by Dr. Hare.—Pressure being firmly made so as to bring skin and muscles together, percussion note if anything more resonant over left than right infra-clavicular region. Moist, sonorous, and submucous rhonchi over both chests; rhonchi more singing and coarse over left than right; pulse regular, fair in volume; ordered the following ℞ Mist. effervescens ʒjss., ammon. carb. gr. iij., ft. haust. sextis hôris, and brandy frequently. 7·30.—Much the same; a broad piece of plaster was applied to right chest, and then a broad roller; pulse 120. September 5.—Lies in a semi-conscious state; pulse 100, moderately full; pupils act pretty well; emphysema has extended a little

beyond middle line of sternum, and upwards to clavicle; mouth drawn a little to left side, but tongue does not deviate; tongue brown and dry; vesicular murmur scarcely audible on right, exaggerated on left side. 2·30.—Skin hotter; pulse fuller, 130; respirations 40, short, chiefly diaphragmatic, more evident on left than right side; emphysema does not extend quite so far; percussion note over anterior chest good, but rather duller on right side; posteriorly percussion on right side dull from extreme base to about spine of scapulæ; on left resonance fair; no vesicular murmur to be heard on right side; ordered to be dry-cupped over right side and back. 9 p.m.—Patient is constantly picking the bedclothes; pulse 120; respirations 48. September 6, 9·30.—Skin hot and dry; tongue dry, withdrawn very slowly after being protruded; conjunctiva of left eye more congested; answers questions widely of the mark; pulse 136; respirations 45; very restless during night. 7·30 p.m.—Somewhat clearer about the head; pulse 128, fuller; respirations 46; answers questions better. September 7.—Answers better this morning; redness and shiny appearance, which were evident yesterday about forehead in neighbourhood of wound, have subsided; tongue dry; skin cooler; countenance a little dusky, especially left ear; pulse 136; respirations 49; emphysema has not extended; left lateral region of chest duller as compared with right heretofore. 3·30 p.m.—Pulse scarcely countable; ordered to have brandy more frequently, and add haust. spt. ammon. aromat. mxx. pro. sing. dos. 7·30 p.m.—Respirations 48; pulse 122; feels tightness across chest; much less disposition to sweat; has rallied somewhat under influence of stimulants; ordered mustard poultice to left chest. September 8.—Has wandered during night, but is collected this morning; face not so dusky, but left ear a little more so; pulse 126; respiration 50, laboured; tongue moist; skin cooler; loud mucous rhonchus is heard over whole of left chest, and at nipple on right; ordered a mustard poultice over anterior part of chest. 2 p.m.—Pulse very weak, scarcely countable, about 204; respirations 50, very difficult; cold, clammy perspirations. At 2·30 p.m. patient died, having remained conscious to the last. *Post-mortem, eighteen hours after death.*—Emphysema extends over whole of right side of thorax. Head.—On removing scalp a fracture of the skull is found just below lower lip of wound, over left forehead; it cannot be felt by passing finger over it; not the slightest depression. The fracture extends from the infra-orbital notch, with slight obliquity upwards and outwards for an inch and three-quarters, then turns at a right angle outwards to temporal ridge, and there ends. About an inch above orbital ridge is another crack, extending from oblique fracture to temporal ridge. On removing calvaria a large amount of extravasated blood is found between dura mater and skull at seat of fracture. Vessels of arachnoid and pia mater do not appear fuller than natural. The convolutions are slightly flattened. Brain on section is paler than natural, very few red points to be seen. Occupying nearly the whole of anterior lobe of left hemisphere is a triangular clot of blood, extending back nearly to the Sylvian fissure, the brain-substance around seems natural, except anteriorly, opposite seat of fracture, it seems to be lacerated and ruptured. At posterior part of right occipital lobe is another clot, about the size of a filbert; brain-substance around is softened and stained yellow; no fluid in ventricles; corpora striata and optic thalami are healthy. There is no extravasated blood around optic nerve, or medulla, or in the interior of latter. Cerebellum natural, but pale. On stripping dura mater from base of skull, the fracture is seen to extend through orbital plate to suture between latter and ethnoid bone, then runs a short distance along the suture, crosses smaller alæ and body of sphenoid, through optic foramen of right side to sphenoidal fissure, and thence on outer side of foramen rotundum to foramen ovale, where it ends. On outer side of orbital plate is another fine fracture, which runs backwards for about an inch, but then stops. Thorax.—On cutting through skin over upper part of sternum some extravasated blood is seen, and this is found to correspond with a fracture of second piece of that bone. The anterior mediastinum contains air. The right pleura contain seven and a-half ounces of bloody-looking fluid. There are old adhesions opposite nipple. No fluid in left pleura; normal quantity in pericardium; heart healthy. Lungs.—The right is collapsed, but did not rise when thorax was opened. On inflation, air is found to escape, and at posterior part of middle lobe is a laceration about three-quarters of an inch long. Bronchial tubes much reddened, and contain a small quantity of frothy mucus. Left lung.—On cutting into upper lobe the surface looks red, and on squeezing it frothy mucus exudes; its tissue seems natural; it does not break down under pressure. The lower lobe is of a darker red; when squeezed, purulent fluid escapes, and its tissue breaks down very easily under pressure of the finger. The bronchial tubes are reddened, and contain a quantity of frothy mucus. The fourth, fifth, and sixth ribs are broken in two places, and the third in one place. Abdomen.—All organs are natural. No fracture of pelvis.

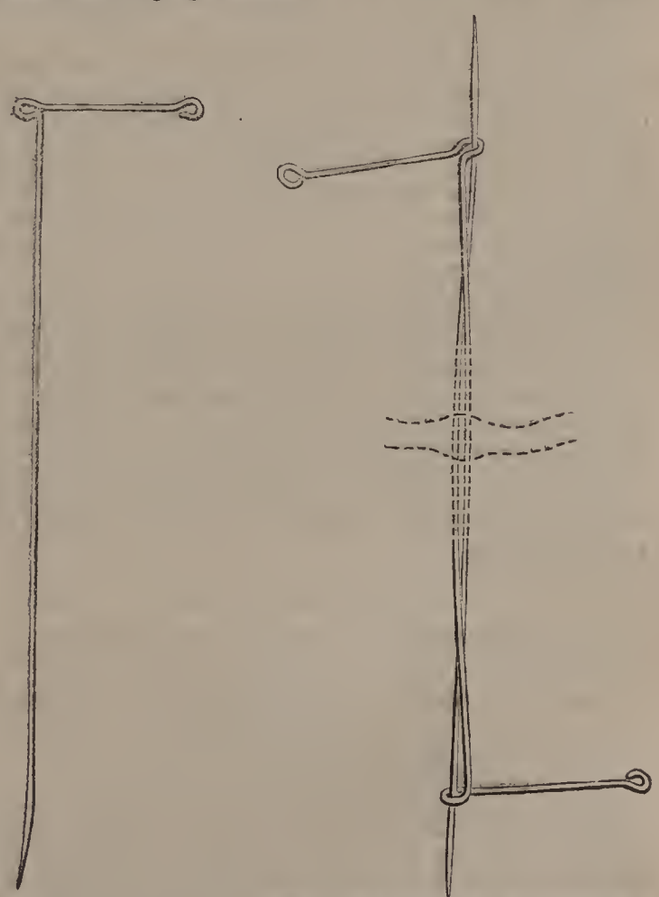
(To be continued.)

KING'S COLLEGE HOSPITAL.

NEW OPERATION FOR THE RADICAL CURE OF VARICOSE VEINS.

By Mr. WOOD.

The patient, a female, had been subject for years to varicose veins of both legs, which were so painful that she applied for something to be done to cure them. Mr. Wood's operation consists in the application of a pair of needles, invented by him for this purpose. The needles, of the thickness of an ordinary harelip pin, are bent at right angles, about an inch from the head, forming, at the bend, a loop for the reception of the point of the fellow needle. The head, or blunt extremity, is also formed into a loop to serve for the purpose of retention by a strip of lint or plaster. The point of one needle is straight and spear-shaped, as in the harelip pin; that of its fellow is curved as in the ordinary surgical needle for sewing up a wound.



The curved needle.

This represents the two needles *in situ*. The vein is represented by dotted lines as passing between them. The needles are also seen to be twisted upon one another.

The method of application is as follows:—The skin over the vein being pinched up and raised from the vein by the finger and thumb; the straight needle is passed close under the skin, between it and the vein. The finger and thumb are then adjusted so as to raise the vein from the fascia a little on one side of the needle. The curved needle is then passed through the same punctures in the skin as the former one, but in an opposite direction and under the vein, which is thus included between the needles. The needles are then locked on to each other by passing the points of each through the

loop at the bend of the other. The punctures are then protected from pressure by the interposition of a piece of lint or wash-leather, and the needles pushed in so that the loops are close to, but do not press upon the punctures. The points of the needles are then cut off with pliers. The bent head of one needle is then turned upon its fellow until it lies on the limb in the same direction. This will be found to twist the shafts across each other in such a manner as to compress laterally the included vein, and at the same time slightly to twist it. The needles are then held firm in their places by a strip of lint twisted figure-of-eight-wise, and a strap or two of sticking-plaster, care being taken to prevent all chafing. They are left in a week or ten days, until so much effusion has taken place as permanently to obstruct the current in the vein, and by progressive absorption from *acupressure on both sides* to cause complete obliteration. In the many cases treated by Mr. Wood in this manner, there has been no suppuration whatever in the track of the needles, when care has been taken to prevent chafing or irritation. A drop or two of serum, forming a sugar-like crust, is the only discharge.

This plan, remarks Mr. Wood, possesses the advantages of being almost entirely free from pain (the skin not being included in the pressure); of giving rise to no irritation or suppuration, which is invariably the case, he says, when apparatus is used which presses into the punctures, or includes the skin, or requires subsequent twisting or tightening. It has also the advantage of a complete, equable and constant lateral and linear acupressure without movement or disturbance; and so is insured an obliterating action on the vein, proceeding equally from the two sides. By this means, he adds, the patient is insured against the danger of putrid matters or pus getting into the circulation through the vein operated on.

In the ordinary method of passing one needle under the vein and a twisted thread or wire over the skin, it will be seen that the acupressure is on one side only, the soft tissues of the fascia, fat, and skin, being the resisting force on the other. The effect is similar to that of pressing with a stick upon a soft cushion. The coats of the vein are absorbed on one side only, and when half cut through the current may be established on the other side of the needle, and the operation fail from this cause or purulent matter pass into the half-opened vein.

The patient after the operation remained entirely free from pain. The dressing was not disturbed, except once to ascertain the condition of the punctures on one leg, until the tenth day, when the needles were withdrawn with great ease. No suppuration whatever had occurred. The punctures were almost exactly in the same condition as on the first day. No blood followed the withdrawal of the needles. A hard line in the centre of a transverse depression was felt after their withdrawal, no swelling or hard coagulation in the veins below the blood having found its way through the collateral venous channels.

LIVERPOOL ROYAL INFIRMARY.

OPERATION FOR IMPERFORATE VAGINA—RECOVERY.

(Under the care of Mr. LONG.)

[Reported by Mr. R. HARRISON, House-Surgeon.

Imperforate Vagina in a Well-developed Woman—Vesico-Vaginal Fistula—Operation by the Introduction of a Trocar through the Vagina into the Uterus—Subsequent Menstruation by the Anus through an opening made between the Uterus and the Rectum.—Ellen E., aged 17, was admitted into the Infirmary on February 14. She states that she first felt what she considered to be menstrual pains when 12 years old, but unaccompanied with any signs of discharge. She obtained Medical advice, and underwent some operation. She is certain that prior to this no vagina, or, at all events, a very slight one, existed, and that by the means then adopted the length of the passage was increased. No appearance of menstrual discharge followed the operation, but there was a regular monthly menstrual nisus, denoted by pain and the usual constitutional symptoms.

On admission her general appearance and her breasts were those of a fully-developed female. The pain that was formerly monthly was now of daily occurrence. On examining the abdomen, a large tumour could be felt above the pubes in the mesian line of the body, about the size of a fœtal head. The external parts of generation were fully developed, but the clitoris imperfectly so. The finger being introduced, passed into a cul-de-sac about an inch long, and if pressed upwards passed readily into the bladder, the lower surface of the urethra being deficient. A fluctuating tumour in the body of the uterus could be felt; the tumour could also be felt by introducing the finger into the rectum. Notwithstanding the abnormal condition of the urethra, she was able to retain her water. There was a hard cicatrix at the bottom of this cul-de-sac, but the anterior walls of the vagina being united to the posterior, nothing beyond this could be felt.

By using the knife with the view of separating the walls of the vagina, assisted by sponge tents and the occasional introduction of the finger, the length of the vagina was extended to about two inches, and the cervix uteri felt distinctly through the intervening structures.

On March 10, the uterus being largely distended, a long curved trocar was introduced by the cul-de-sac in the axis of the uterus through the resisting surface, and about a pint of the usual treacle-like fluid at once escaped, and continued to do so for about two days. The tube was allowed to remain in for twelve hours.

19th.—The discharge has assumed the character of the lochia, accompanied with rigors and severe constitutional disturbance. The parts were freely syringed, and opium and wine administered.

21st.—Is very much better, the discharge gradually becoming purulent.

A week after the operation she was able to leave her bed, the uterine tumour having almost disappeared.

30th.—Was discharged. A day or two previous to her leaving, a slight purulent discharge, per anum, took place. Three weeks after leaving, she had the usual menstrual pain and a sanguineous discharge, which continued for ten days, per anum. Five weeks afterwards, she was again "unwell," per anum, and early in July she presented herself for examination, being "unwell" at this time. She was examined on July 12, the discharge having ceased. The vagina is about two inches long, soft, and dilatable, and ends in the cul-de sac, but the cicatrices previously mentioned have entirely disappeared. The length of the septum between the bladder and vagina is about an inch. On introducing the finger into the bladder, the neck and body of the uterus can be felt of about the normal size, and on passing the finger into the rectum as far as possible beyond the neck of the uterus, a slight depression can be distinguished, and with the speculum this is seen to consist of a raw surface without a distinct opening, but no doubt through this the menstrual discharge escapes.

It appears, then, that the cervix uteri at the time of the operation was tilted forwards towards the bladder, that the trocar did not enter the centre of the cervix, but at its posterior part, that as the uterus emptied itself, the cervix resumed its natural position, that is, towards the rectum, that the thin connexion between the posterior wall and the uterus probably ulcerated, the cervix slipping backwards more towards the rectum, and that the posterior wall uniting with the anterior after the operation, occluded the vagina as before. Be this a correct supposition or not, she has full command over her bladder, a vagina two inches long, a uterus of about the normal size, and menstruates regularly per anum. She is in robust health, has all the full characteristics of a woman as to development, breast, etc., and is about to take a place as a servant.

PATHOLOGICAL SOCIETY OF LONDON.—The first meeting of this Society for the ensuing session will be held next Tuesday, October 15, at eight p.m., for the exhibition of specimens as usual.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At a meeting of the Association of the Fellows and Licentiates of the above College held on October 2, the following were elected officers for the year 1861-62:—*President*—The President of the College of Physicians. *Vice-Presidents*—Drs. O'Brien Adams and Churchill. *Council*—Drs. H. Kennedy, M'Clintock, Fitzpatrick, Moore, and Atthill. *Treasurer*—Dr. G. Kennedy. *Hon. Secretary*—Dr. B. Grattan Guinness.

Medical Times and Gazette.

SATURDAY, OCTOBER 12.

ROMANTIC PHYSIOLOGY.

Sir Edward Lytton Bulwer's "Strange Story," which appears in the weekly numbers of *All the Year Round*, shows how multifarious are the sources from which the versatile and encyclopædiac author draws material for gratifying the sense of the romantic and mysterious. The nature of the nervous force; the essence of the vital principle; the possibility nay, the certainty, that the principle of life must be certainly ascribed to a gas,—and whatever is a gas, chemistry should not despair of producing!—such are the topics employed to excite the sensations of wonder in the itiose readers of modern romance. The precious dictum as to the "principle of life being ascribed to a gas," is supported by a quotation from "Liebig, Organic Chemistry, Playfair's Translation, p. 363," in these words, "According to the views we have mentioned, we must ascribe life to a gas; that is, to an aëriform body." Thus Liebig is made an authority for this preposterous piece of materialism.

In dealing with a romance we labour under this difficulty —we cannot tell whether any given statements are intended to be soberly believed as the author's, or whether they are mere extravagances put into the mouth of the characters to be played with. In the case before us, as the sentiments regarding the gaseous nature of the principle of life are gravely supported by a quotation from Liebig, we must suppose that they are intended to be received as true or probable. In the one case—that is, supposing that the hypothesis to be merely advanced in sport—it is an unwarrantable liberty to use the name of a great philosopher, and to pervert and make nonsense of his words, in jest; in the other case, it is almost criminal to make a deliberate misquotation from his works, in such a way as to make it appear to the ignorant that a sentiment which Liebig never holds, nor held, nor treats of, is gravely held by him as a truth.

The paper from which this atrocious misquotation is made occurs towards the end of Liebig's Treatise on "Chemistry in its Application to Agriculture and Physiology," translated by Lyon Playfair; and the edition which we happen to possess is the second, published in 1842. Liebig is discussing the nature of poisons, contagions, and miasms, and is examining the value of the several theories which have been propounded to account for them. Of such theories there are two chief ones: that which ascribes to them *vital* force, and holds that they consist in fungi, or other organised bodies possessing the power of propagation; and that which ascribes them to *chemical* action. Liebig, as is well known, upholds the chemical in contra-distinction to the vital theory. He shows that if the power of transformation—the power by which any given substance in a given state—say a piece of wood in a state of decay—is enabled to impart its own state to another body of the same kind—is to be regarded as life, that "the majority of the processes which occur in organic chemistry" must be vital too. "Life would, according to that view, be admitted to exist in every body in which chemical forces act." A burning stick is alive, and communicates its life to the fire-grate. He next shows how the idea of life, though it involves that of chemical processes as necessary instruments, involves very much more than mere chemistry. He then shows the analogy of the action of the small-pox virus and other animal poisons to that of chemical agents which excite transformation in organic matters, as oxanide does in oxalic acid; and introduces the *reductio ad absurdum*. "Several kinds of contagion are propagated through the air; so that, according to the view already mentioned, we must ascribe life to a gas, that is to an aëriform body." In other words, if contagions have life, the air must be alive.

Not a word is said which signifies that *life is a gas*; but, on the contrary, that if certain absurd conditions be granted, then *a gas must be alive*.

We have written rather warmly on this most execrable perversion of the sentiments of Liebig, and on the moral wrong committed when he is made thus unwittingly to support a frivolous hypothesis contrary to all common sense. We have so written because that which is simply despicable in the eyes of the philosopher has a certain charm in the eyes of the vulgar romance reader, and fills him with notions which—as all false opinions of all kinds do—tend to the destruction of human life. Romance writers have almost exhausted all the fields of human activity. Love, of course, is a never-failing topic, and instead of the coarse material descriptions of the days of "Tom Jones" or "Peregrine Pickle," we now have sensuality in the subtlest and most refined forms that can haunt the inmost imagination. Religious novels are a drug, so abundant are they; historical romances create a smile as the recollection of James and his two horsemen rises to the mind. Science now, alas! remains to be prostituted, and just those subjects which are the most unknown and mysterious are made the topic of audacious speculation.

But why not? Some one may say, "Why not let people amuse themselves with scientific romances as well as with historical?" For this reason. There are in society some persons who appreciate work and workers. There is a far larger portion who delight in dreams and dreamers. Ours is a working Profession. We confess our knowledge to be very imperfect, but we are incessantly adding a little here and altering a little there, as daily experience enables us to add bit by bit to the accumulated truths of ages. Not so the dreamers. They start at once, each with a finished theory or "system," which professes to embrace all truth and solves all difficulties. They want no work at dry daily matter of fact. Nay, it is repulsive to them. Having imagined their theory, they imagine their results, and being destitute of the power of observation, chronicle every fact in the way to suit their purpose. Such are Homœopaths, Mesmerists, Spiritualists, and Hygeists. By indulgence in dreams of vital essences, of logically certain short cuts to restorative health, of Mesmeric communicants of nervous power, the mind of the dream-loving sections of society become debauched. They hate plain, honest labour and its confessedly uncertain results, they reject physiology and the knowledge of daily life, and they fly when sick to the quack who possesses an infallible nostrum, who promises the jaded debauchee a draught of vital essence or the renovating influence of quasi-licentious Mesmeric manipulations.

Before we dismiss this romancing intruder into the domain of Physiology, let us say that, fond of a hazy spiritualism, he lays before his readers the mystical power of the human Will (of course Will has the dignity of a capital letter) in moving a magnetic needle. He introduces a machine for increasing the electric current produced by muscular action:—

"The theory is, that if you clutch the cylinder firmly with the right hand, leaving the left perfectly passive, the needle in the galvanometer will move from west to south; if, in like manner, you exert the left arm, leaving the right arm passive, the needle will deflect from west to north. Hence, it is argued that the electric current is induced through the agency of the nervous system, and that, as human Will produces the muscular contraction requisite, so is it human Will that causes the deflection of the needle. I imagined that if this theory were substantiated by experiment, the discovery might lead to some sublime and unconjectured secrets of science. For human Will, thus actively effective on the electric current, and all matter, animate or inanimate, having more or less of electricity, a vast field became opened to conjecture."

Apropos to this, let us mention the following anecdote :— Nearly ten years ago, a most distinguished Surgeon, of great endowments in Mechanical and Physical science, called on the writer to show him (besides some curious inventions which are now in use), a machine he had invented for measuring the force of the electric currents excited by muscular action. There were two cylinders to be grasped, wires, etc., needle, galvanometer, as usual. On grasping either cylinder, the needle was deflected, and so on. "I am on my way," said our friend, "to show it to Faraday." He departed. Soon, however, he returned, with a kind of honest satisfaction beaming in his face,—"I have shown it to Faraday, and he has convinced me that the electric currents are due, not to the muscular action, but to the friction of the hands against the cylinders. So I shall go home, and say no more about my muscular electrometer." May all inventors have as good a conscience.

THE WEEK.

We are but too glad to assist in keeping the claims of the Medical officers of the Army before the Profession and the public. It is perhaps unnecessary to repeat that a Royal Warrant of October, 1858, made a clear and satisfactory definition of the military status of the Medical officers, and was generally thought to put that status on a fixed basis, and to offer inducements for the best and most promising young men to enter the Service. It took away the galling idea that there were not merely gradations in rank, but differences *in genere* between Medical officers, as such, and military officers. Assistant-Surgeons were to rank as lieutenants, and, after six years, as captains ; Surgeons as majors ; Surgeon-majors as lieutenant-colonels, but junior of that rank, and soon, according to the dates of their commissions. Such relative rank was to carry with it all precedence and advantage duly belonging hereto ; with the exception of the presidency of courts martial. It was to regulate the choice of quarters, lodging-money, servants, forage, fuel, etc., and provided that "Medical officers shall be held entitled to the same honours as other officers of the Army of equal relative rank." But some of these most valuable privileges have been annulled by a second Warrant, of March, 1861, which not only lowers the relative rank of staff and regimental Surgeons, but tends to alter the status of the Medical Service from the military to the *civil* department of the Army. By this arrangement they are deprived of funeral honours granted to officers of the same relative rank, and are exposed to other petty annoyances. If, as we have before said, the country wants the best men, it must pay them with the uncostly remuneration of *honours*. If it begrudge that, no money will suffice. An Army Surgeon, writing in the *Times* of October 7, says :—

"The Warrant of 1858 had the effect of inducing a superior class of men to enter the Medical Department of the Army. It is no less a matter of observation now that its violation deters the most promising students in the schools from accepting Her Majesty's commission, while it excites a dissatisfaction among those Medical officers who entered the Army on the faith of the promise which it held out which must prove most prejudicial to the public service. We do not constitute ourselves judges in our own cause, we do not fix the rank in which we desire to be placed ; all we require is to be reinstated in that position for which we were deemed qualified by a specially appointed Commission, and to which we were raised by Her Majesty's command, and all we ask is that a great and respected Government will keep that faith with its officials which could be wrung from less exalted employers by the laws of every civilised community."

The new scheme of Medical Education meets with general approval. The following extract from an excellent introductory lecture by Dr. Donkin, at the Newcastle College of Medicine, is only one instance of the manner in which the principles of the scheme are received, although of course all are not agreed as to details. Dr. Donkin says :—

"The scheme enjoins, first, that every Student commencing his Medical studies from this day henceforth must be registered under the provisions of the act. But to enjoy this privilege, he must produce evidence of having passed an examination in arts before one of the Examining Bodies prescribed by the act. Secondly, that he shall commence and pursue his strictly Professional studies for a period of four years after his examination in general education.

"Now, gentlemen, it will be obvious, on the slightest reflection, that two results must accrue from a scheme so excellent, in which we perceive the recognition of the principle, that to render the acquisition of special or strictly Professional knowledge easily attainable, the mind must previously be subjected to a rigid system of training. In the first place, a boy destined for the Medical Profession will not, as hitherto, be removed from school at the early age of fifteen or so for the purpose of entering on a long period of Medical apprenticeship within the precincts of a surgery, there forgetting the little he had previously learned. On the contrary, the necessity of acquiring the varied and extensive amount of general knowledge required of him before he can secure the privilege of being registered as a Medical Student will compel his attendance at some educational seminary until the age of seventeen or eighteen at least. In the second place, the extension of the period of strictly Professional study from three to four years to render the lowest qualification obtainable will assuredly enable any Student possessed of moderate ability, aided by industry, to become familiar with the principles and details of his Profession, without having recourse to the pernicious assistance of the 'grinder,' by whom a species of information is forced into him by the agency of high pressure, only available for the immediate purposes of an examination, and totally unfitted for his guidance in after years, while engaged in the discharge of his Professional duties. In short, the result of the system of education, general and special, which I have just indicated, will be to create a class of Practitioners more highly educated than any other community of professional men in this country, because the range of their studies will embrace almost every species of knowledge now taught in a modern University, with the exception of theology, music, law, and political economy. Under its influence a high standard of Professional proficiency will be disseminated everywhere in this country, and a high social position accorded to those in the possession of such attainments."

It has been a matter of surprise to us from the very commencement of the proceedings known as the "Rugby Romance," that little or no allusion was made to the child's state of health. After reading of the sensation created in Court by the appearance of the poor little sufferer, with his head enveloped in lint and bandages, and his leg in splints, the public naturally looked for some Medical testimony or report of the case ; but nothing more was heard of the little fellow. Having recently received some information as to his state, we feel called upon to lay before our readers the following facts :—It appears that notwithstanding the statement at first put forth, to the effect that the child was a "fine healthy child," this soon turned out to be incorrect ; on the contrary, shortly after its discovery such a train of symptoms began to manifest themselves, as clearly to show that the child's constitution had suffered materially, in consequence of the poverty, neglect, and injurious influences to which it had been so long subjected. The child was brought back from Brussels, and placed under the care of Dr. Scott, of Upper Woburn-place, Russell-square. It appears that this gentleman found the little fellow much emaciated and debilitated, and with marked indications of tuberculosis or scrofulosis. There were disordered bowels, tympanitic abdomen, signs of an enlarged mesentery, enlarged glands of the neck, pustular eruptions behind the ears, blotches on different parts of the

body, and animal and vegetable parasites infesting the scalp. One of the lower limbs was found in a very weakly and deformed condition, and was placed in bandages and splints. It since turns out that the poor little fellow got his femur fractured. Although much improved since first placed under Dr. Scott's care, he may still be said to be in a precarious condition, as might naturally be expected from the complication of evils to which this poor child was exposed. Scanty food and imperfect nourishment, scanty clothing, exposure to wet and cold, miserable lodgings, where it shared the bare boards with other wretched inmates—the ill-fed, half-starved, ill-clad and unwashed—its skin food for parasites, while its young lungs and blood were contaminated by the putrid emanations of the bodies huddled together in a dark, ill-drained, unwholesome dwelling, ventilated only by the stagnant atmosphere of the dark alley below.

We have received the Prospectus of

"The Medical Dissenter, or Unregistered Doctor: a Weekly Journal of Health, adapted to Popular and Professional Reading; and devoted to a thorough examination and exposure of a jealous, rapacious, selfish, hypocritical, insolent, domineering, inadequate, anti-progressive, but oppressive holy alliance of Privileged Quacks and Routinists, whose overshadowing Charter-rights, pedigrees, monopolies, and ingenious conspiracy to rob, drench, poison, mangle, and slaughter the people, is perpetuated by Act of Parliament.

"This Journal will be the defender of Medical Dissent and Nonconformity, whether exercised by Allopaths, Homœopaths, Hydropaths, Botanics, Galvanics, and Eclectics, Chemists or Druggists: it will assist in promoting universal inquiry, general improvement, and perpetual progress in Medicine. It will be confined to no one idea. It will be the servant of no Medical sect; the organ of no Medical party; the defender of no Medical faith; the establisher of no Medical creed; the expounder of no Medical hobby; the instrument of no Medical dictator; the mouthpiece of no Medical dogmatist; the advocate of no exclusive interest. It will seek to promote the general good—to defend Dissent generally; to establish the claim of all Dissenters to fair-play, free trade, and protection against the persecution and oppression of a despotic Medical monopoly. It will contend for every man's right to equality before the law in the matter of healing, unchecked by any power but the power of enlightened public opinion, justice, and the common law.

"Free trade is the ground. The occupancy is for all. The desire is to hear and be heard; to receive as well as to impart. All Medical Dissenters, therefore, through this medium, can express their own views and sentiments for themselves."

It will be curious to see how the Homœopathic doctrines will amalgamate with those of the disciples of the "great Hygeist."

The Homœopaths, discontented with the unequivocal verdict of the Profession, are striving hard to raise a storm in the newspapers, and to represent themselves as victims of an illegal combination, or "strike" of their professional brethren, and to open afresh the whole question of consultations. A writer in the *Times* ventures to describe the Homœopaths as a body of men who have adopted and used remedies, in addition to those used by the regular Faculty. He leaves out of sight the fact that they begin by denying the whole basis of Medicine and the whole results of past experience and set up an exclusive and incompatible theory instead of it. What is the use of consulting with men who deny the whole doctrine of the material causes and conditions of disease, and hold it to be an aberration of an immaterial principle? to be treated with drugs endowed with virtues generated by friction? The *Star and Dial* blows its penny American whistle, and vituperates the Profession for its obstinate adherence to old theories! —

"The unsatisfactory state of Medical science is chiefly (says the *Star*) to be ascribed to another cause, the influence of which is alike powerful and deplorable. It might naturally be expected that the professors of an art, the whole history of which is an unbroken chain of errors refuted, fallacies demolished, and false theories overthrown, would be especially accessible to new truths, and ever eager to investigate the claims of novel suggestions to adoption. Whoever entertains such a notion is a victim to the grossest of all conceivable delusions. There are no men who, as a body, shut their eyes more obstinately to the teachings of experience, or cling more pertinaciously to the belief that there is finality in the dogmas which make up the shibboleth of their science. This rooted servility to old dogmas, which are worshipped as reverently as if they were the utterances of inspiration, is the great stumbling-block which bars the way to the progress of Medical science."

The absurdity of blaming us, first, for the number of errors, fallacies, and false theories we have deserted, and then for clinging to them pertinaciously, does not seem to strike the writer. If we disbelieve the Homœopathists' doctrines and doubt their alleged facts, how can we honestly associate with them?

The fact of the positive causation of typhoid fever by sewer poison is now established. Deaths from that disease, therefore, clearly rank under the head of preventible or accidental deaths, just as much as do deaths from arsenic or from prussic acid. And just like other cases of poisoning, cases of typhoid fever may be attended with any degree of criminality or with none. The poison may have gained access to some well-managed house, through some unknown and unsuspected channel, in spite of all care; or it may have been allowed full play through the carelessness and neglect of those whose duty it is to have removed the causes. We cannot see what difference there is in principle between allowing sewage-matter to soak into and infest human dwellings, or allowing the drinking-water to become impregnated with it, and permitting a person to take arsenic. In one case the allowing human beings to lose their lives is as criminal as in the other. Acting on this principle, some of the Southampton Medical men have most justly called in the aid of the Coroner, in order to submit the facts connected with the death of a child from typhoid fever. Is the disease preventible? If so, where does the blame rest? Such are the questions that ought to be put and answered. In the case before us Dr. Edwin Hearne, who attended the child, described the house as situated immediately under a high embankment, not permitting a free ventilation either north, south, east, or west. There was a closet without water upon the premises; there is a small back yard apparently on the blue clay, full of holes, and neither bricked, paved, or gravelled; there is a drain with a small external opening, untrapped and choked up, which is not calculated to carry off sufficiently the moisture which must accumulate. Water is not laid on the premises, and the occupiers have to fetch it from a distance, there being no pump, so that even the water to cleanse the closet has also to be fetched. The closet is attached to the house, a thin brick wall separating it from a copper which is in the back kitchen; the copper would no sooner be brought into use than deleterious gases would arise. The house is one in a row which in several respects appear to be similarly situated. Fever has prevailed lately in the locality, and three deaths have occurred within the last three weeks. A father came to nurse his son, became ill with fever from breathing the impure atmosphere, went home, and died, without communicating the disease to his family in another place, showing that the disease is produced by the deleterious air of the locality, and is not capable of being propagated when taken to a healthy atmosphere. "No such disease as typhoid fever is known, unless in conjunction with defective sanitary

arrangements." Mr. Francis Cooper, the Medical Officer of Health, gave additional evidence as to the drains, which were utterly inefficient, and must have caused damp and malaria; and the jury, after a prolonged inquiry, found, "That the child died from fever, hastened by the defective state of the drainage, produced by the want of a good supply of water."

We hear of the happiest results as attending the disinfection of the sewage of Carlisle and Exeter by means of the crude carbolic acid, the leading ingredient in M'Dougall's disinfecting powder. Mr. P. H. Holland, the well-known Medical Inspector under the Burial Act, describes the cost of the process, as carried out in the St. Thomas' district of Exeter, as only 10½d. per diem, that being the value of one gallon of crude carbolic acid and the carriage of it from Mr. M'Dougall's, of Manchester. This substance added to the sewage completely deodorizes it, and leaves it in a condition fit for agricultural purposes. We are tempted to ask why the process cannot be carried further? If one gallon of carbolic acid will purify the sewage of an entire district for one day, it would probably be enough to act on the sewage of a single house for one year, and so make the inhabitants safe from typhoid fever.

A correspondent sends us an account of the exceedingly insalubrious state of Harwich, and of the truly Continental stenches which arise from the want of drainage in the streets, and the offensive mud of the harbour. He observes, also, that whenever the wind blows over the cement factory, the air is filled with a peculiarly subtle and irritating vapour, the unwholesomeness of which is shown by its effects in a state of concentration. He also alleges that the churchyard gives issue to the most disgusting odours. We invite the attention of the Medical Officer of the Privy Council, and of the Burial Acts Inspector to the place. There is a cement manufactory at Dovercourt, close to Harwich, and connected with it are some wretched hovels, occupied by the families of the men employed in the works. These hovels have long been notoriously unsafe, from the fumes of sulphur generated in the manufacture of the cement; and it is said that persons have been made ill and insensible in them. Now, however, the deed has been done on a grand scale. On Wednesday evening, a man who occupied one of the hovels, returning from a visit to Harwich, about 11 p.m., discovered his wife and child, and a fellow-labourer and his wife, dead. The house was so filled with poisonous fumes that he had some difficulty in escaping. The Coroner's jury have returned a verdict of "accidental death," accompanied with a request that the hovels may be pulled down.

Dr. Greenhalgh was elected on Tuesday Physician-Accoucheur and Lecturer on Midwifery at St. Bartholomew's Hospital, as successor to Dr. West. We hear that the name of Dr. Greenhalgh was sent up with the names of three other well-known Physician-Accouchers from the Medical Committee to the House Committee, and the latter body elected him by a unanimous vote. Without the smallest reflection upon the other competitors for this very important appointment—and they were all gentlemen of high character and reputation—we may congratulate both Dr. Greenhalgh and his colleagues upon his success. It is something that a great Hospital like St. Bartholomew's should elect any one not a "Bartholomew man," and it is something more that a hard-working man who has risen by his own industry should, after a hard struggle of many years in private practice, at length attain a high Hospital appointment. Dr. Greenhalgh has had a large experience in midwifery and the diseases of women in various Lying-in Charities, and latterly at the Samaritan Hospital, where he succeeded Dr. Priestley. His well-known cases of Cæsarean section and others published in this Journal, prove that he has made good use of the large opportunities of observation which he has enjoyed, and we trust that in his new field the industry and intelligence which have characterized him in the past will continue to secure for him an honourable and successful career. His late colleagues at the Samaritan Hospital may reasonably look with some satisfaction, first on Dr. Priestley's appointment to the Middlesex, and now on Dr. Greenhalgh succeeding Dr. West at St. Bartholomew's.

The Metropolitan Board of Works invited a large party of vestrymen from the various parishes to meet at Old Ford, Bow, on Wednesday, the 9th inst., to inspect some of the new works of the Main Drainage Scheme. Several Medical Officers of Health, including Drs. R. D. Thomson, Aldis, Ballard, and Challice, accompanied the vestrymen. We read in the *Times* that—

"The Northern High Level Sewer, which extends for a length of nine miles, from Hampstead to the river Lee, at Bow, varying from 4ft. in diameter to 9½ft. by 12ft., forms a substitute for the open Hackney-brook and Fleet sewers. This section of the work is now completed, and the penstock-chamber, tide flaps, and overflow channel at the junction of the High Level, the Middle Level, and the Outfall Sewers are works of magnitude and interest.

"At the river Lee the abutment of the aqueduct on the west side is completed, and the brickwork of the eastern abutment and towing-path wall is rapidly progressing within the coffer-dams, and will soon be ready to receive the iron superstructure. The Middle Level Sewer contract, under Messrs. Brassey, extends from Kensal-green to the penstock-chamber at Old Ford, Bow. The main line and branches are 12½ miles in length, varying in size from 4ft. by 2ft. 6in. to 12ft. by 9ft. in diameter. This work is now in full operation at Old Ford and in the Bayswater-road, and it is now being tunnelled under Oxford-street. Arrangements are being made with the contractors to prevent, as far as possible, inconvenience to the important thoroughfares through which it passes, and particularly during the season of the Exhibition of next year. The total value of the work executed under this contract is £63,000, and the work is of good quality. The Ranelagh Storm Overflow, across Hyde-park and Kensington-gardens is drawing near to completion, although much delay has occurred in the tunnelling, from bad ground and other difficulties, and the value of the work executed is £22,000."

A shocking occurrence has taken place in the Isle of Thanet. A Captain Durant was seen on Saturday, the 28th inst., on the beach at Herne Bay, shouting out the ordinary military words of command. Next, he was seen to take a lad, clad in livery (his own servant), walk with him into the water, and try to drown him. Then he set off walking on the road to Canterbury, taking the boy with him,—

"Presently," says a correspondent of the *Standard*, of October 3, "he met a market woman, of whom he bought two bouquets, paying for them out of a bundle of gold, silver, and copper coins which he had tied up in a handkerchief with a bit of ribbon. He told the woman that the boy was a dreadful liar, and that he had told him his last lie that morning, but he pointed significantly to the pocket-knife he had with him, and asked her if she recollected the story of 'St. John's head on the charger.' He then told her that he was the Count de Chambord, that he expected the King of France to dine with him very shortly, with a variety of incoherent expressions. He left no doubt in the minds of the bystanders of his complete insanity."

The gentleman who writes thus to the *Standard* goes on to say, that after much trouble he induced the unhappy man to walk back with him to Herne Bay. He rambled about in an extravagant manner, and began to undress himself in a shop which he entered to make a purchase. At last his wife came

up in a carriage, and to her care the unfortunate man was committed. She does not seem to have entertained the slightest doubt of his sanity. He was still permitted to go at large. He went over to Ramsgate, got into liquor, behaved extravagantly in the Roman Catholic Chapel, went rambling about in the marshes, and not long after was found dead in a ditch. The writer in the *Standard* comments indignantly on the apathy and infatuation of Captain Durant's friends, who permitted him thus to go uncared-for and to lose his life in this miserable manner. Not less does he comment on the refusal of the policeman to take any efficient charge of him. But unluckily it is not possible, without a great deal of personal trouble, for any stranger to cause steps to be taken for the protection of a madman.

A new *Société Universelle d'Ophthalmologie* is in course of formation, and proposes to hold a Congress in Paris, during the present week, viz.—from the 10th to the 13th October inclusive. The Secretaries are M. Vauquelin, Rue de Rivoli, No. 66, Paris, and M. J. Leport, of Rouen. Amongst the names of the *adhérents* we notice those of Windsor, of Manchester, Streatfield, John F. France, Bodkin of Tuam, Bronner of Bradford, and W. R. Beaumont of Toronto. The conductors of the Belgian *Annales d'Oculistique* look with disfavour on the new Society, and refuse to give it publicity in their pages. We, the natives of a small, foggy island, whose climate is the topic of universal execration, have, nevertheless, the privilege of managing our own affairs, and of setting up or altering Societies, and arranging their meetings, and discussing what we please at them. The members of the Obstetrical, the youngest of the Societies, would never dream of applying to the Home Secretary, or to Sir Richard Mayne, for permission to meet. They manage these things differently in France. It may amuse our readers to see the exact text of the official document by which this new Société Universelle d'Ophthalmologie has been legalised and permitted to have an active existence :—

"*Préfecture de police.—Cabinet.—2e Bureau.—Ville de Paris.—Quartier Saint-Germain-l'Auxerrois.— N° 11. — Société Universelle d'Ophthalmologie.—Notification d'autorisation.*

"L'an mil huit cent soixante et-un, le vingt avril,

"Nous, Henri Bérillon, commissaire de police de la ville de Paris, plus spécialement chargé du quartier Saint Germain-l'Auxerrois,

"Vu la lettre de M. le préfet de police en date du 19 avril 1861,

"Notifions à M. le docteur Vauquelin, médecin-oculiste, directeur du dispensaire Notre-Dame, à Paris, demeurant en ladite ville, rue de Rivoli, n° 66, que, par décision en date du 31 mars dernier, S. Exc. le ministre de l'intérieur a autorisé l'association projetée de médecins-oculistes français et étrangers à se constituer sous la dénomination de *Société Universelle d'Ophthalmologie*, et à se réunir à Paris.

"Cette autorisation est subordonnée à la rigoureuse observation des conditions suivantes :

"1° N'admettre aux réunions ni femmes, ni mineurs ;

"2° Ne s'occuper ni de politique, ni de religion, ni de questions administratives ou commerciales.

"Et, afin qu'il n'ignore ces conditions, nous lui laissons la présente copie de notre procès-verbal de notification. De quoi nous avons ainsi verbalisé les jour, mois et an que dessus.

"Le commissaire de police, BÉRILLON."

The *Bombay Gazette* of the 12th ult. gives the following summary of the late ravages of cholera :—

"The famine in the North-West has been succeeded by pestilence. Cholera is making terrible ravages in that region. The 51st King's Own Light Infantry, forming a part of the Meean Meer Brigade, had up to August 28 lost by this scourge one man out of every five of its original strength, and the wing of the 94th Regiment one out of every four. The following table shows the casualties from cholera among the European troops of the brigade from the 13th up to daylight of August 28 :—

	Men.	Women.	Children.	Total.
Royal Artillery	12	1	1	14
Bengal Artillery	13	0	4	17
51st Foot	161	8	9	178
Wing 94th	107	3	0	110
5th Cavalry	22	0	0	22
	315	12	14	341

"The Commander-in-Chief telegraphed to the General commanding the division to keep the men amused, and cause the bands to play to them. This was a very excellent suggestion; but unfortunately 11 of the bandsmen of the 51st had died, and 10 of the 94th, and many others were in Hospital.

"The troops are encamped in various convenient localities at a distance from cantonments, and change their ground frequently. The services of all Assistant-Surgeons who can by any possibility be dispensed with at other stations have been transferred to Meean Meer. Assistants in the subordinate Medical Department have also been despatched to Lahore as fast as they could be found available. The European officers and men of the brigade are described as thoroughly disheartened and prostrated—a frame of mind extremely unfavourable as regards any improvement in their condition.

"The *Lahore Chronicle* announces the death of Lieutenant-Colonel A. H. Irby, commander of the 51st. When his regiment moved out of the cantonments, to escape, if possible, from the pestilence, which has struck down more than 120 of them, he remained with the sick, caught the contagion, and died at his post. His age was about 40."

The ravages of the present epidemic of scarlatina deserve more attention than is given them. Ninety-nine deaths from scarlatina, and twenty-one from diphtheria, in one week, are evidence of a vast amount of illness. The health and morality of rural districts are now known to be mere figures of speech. In the ill-drained village of Eaton, near Norwich, nine members of one family were found sleeping in an ill-ventilated chamber, fourteen feet by eleven.

The Rev. A. J. D. D'Orsey, B.D., once an invalid at Madeira, now English Lecturer at Corpus Christi College, Cambridge, has published a useful *brochure* in the form of "A Brief Letter of Advice to an Invalid, in Reply to a Request for Advice about Madeira as a Winter Residence." He gives a short account of the climate, of clothes and other necessaries which should be taken, of the rents, customs, religious privileges, etc., and concludes with an exhortation, in which we fully concur, that whoever needs to go should go early, and not put off the journey till another winter has made the cough inveterate.

Another case of poisoning, in consequence of giving an embrocation by mistake for an internal medicine, has occurred, and the victim is Mr. Hanbury Leigh, of Pontypool-park, a gentleman eighty-one years of age. Probably of all the means of preventing such accidents, the plan of using very narrow-necked bottles, so as only to permit one drop at a time to exude, is the best. But it has been well observed, persons who get out of bed half asleep, to take a morning dose of medicine, should take care to have nothing in their way that they can take by mistake.

We regret to learn that Mr. Wakley, the Coroner for Middlesex, is compelled, by the state of his health, to pass the winter in a warmer climate. He has had a severe attack of inflammation of the lungs, and the disease is now lingering in a chronic state.

A correspondent calls our attention to the exceedingly abrupt and discourteous manner in which Mr. Firth, F.R.C.S.,

of Norwich, has been deprived of the office of Visiting Surgeon to the Norfolk Lunatic Asylum. Mr. Firth is a man of high character and acquirements, but these are no safeguard against the tyranny of committees from whom there is no appeal.

A "Volunteer Service Assurance Association," with Dr. John Rose Cormack as Managing Director and Secretary, is proposed to be instituted. It is intended to combine with it an Accident Fund.

As some of our readers may have seen, in a Medical periodical published last Wednesday, an attack upon the character of a gentleman known to be connected with this Journal, we request them to accept our assurance that the charges alleged against him are entirely false. It is difficult to refer to this matter here without giving greater publicity to a most malicious libel; but we may express our confident belief that, even under all the blessed uncertainty of our law, the guilty persons will be taught by a severe punishment, that they cannot falsely assail the characters of any member of our Profession with impunity.

REVIEWS.

Observations in Clinical Surgery. By James Syme, Professor of Clinical Surgery in the University of Edinburgh. 8vo. Pp. 217. Edinburgh: 1861.

There are few men now living who can look back on such a long life of Surgical usefulness as the distinguished author of this newly-published volume. There are few advances in Surgery which have not received some impulse from his indefatigable and vigorous mind. He has not only been one of the chief architects of our present Surgical commonwealth, but also one of its most eminent scavengers, and if his broom splashes some one now and then, we are diverted from the accident by the cleanliness of his own crossing.

His last volume, however, is our special care at present, and a very beautiful one it is. Not, indeed, printed in letters of gold—that colour might be offensive; but the publishers give us type, paper, polish, everything which makes a book pleasant to the reader. Professor Syme's object in publishing this work is to counteract the mischief done by *the silly suggestions of presumptuous folly*. As he does not devote a separate chapter to this subject, we can scarcely discuss it. A remark of such breadth of meaning extends over a wide field. There may, indeed, have been a time when our author has suggested what he thought conscientiously was an improvement, and what his more matured judgment induced him afterwards to lay aside. If he mean by "presumptuous" persons younger and less widely known than University Professors advancing their opinions, we would only refer him to some papers still valued and studied, and, so far as we know, *never* called *presumptuous*, by James Syme when plain Surgeon in Edinburgh. The word "*folly*" means many things. There is the folly of the infant, the youth, the adult, and the garrulous and egotistical aged. It is an element in everything, done spoken, or written. There is a folly of the reviewer; yea, also a folly of the reviewed.

We would consider the papers *seriatim*, and first comes "Fracture of the Thigh Bone." The author seems to be under the impression that it is customary for a Surgeon to "rack his patients by desperately tugging at the bandages" which adjust a Desault's splint to a broken femur. "I long," he says, "believed and taught this." We have not been much more than a quarter of a century in practice, and still young as we are, we were not taught to do so in the London School we attended. The perineal bandage, the ankle bandage were merely placed to resist contraction. We can quite believe that sixteen cases left the Royal Infirmary between September, 1859, and March, 1861, with *one* of the number possessing legs of equal length, but as to the others with shortening which in no instance "*made any* possible difference in the gait," we can only say we would like to see them, and hear their opinion of their own *short*comings. Joe Miller tells of a barber, who when his customer cried out that he had cut him, answered sharply, "Allow *me* to be the best judge, Sir, if you please!" There are some Surgeons very like this barber. But if some are so ignorant of the meaning of bandages as to keep them at a painful degree of tension, let them read this paper and be wise; but it would have added greatly to its value had the author stated in what part of its length the bone was broken, why unfortunate No. 2, who had an oblique fracture of the leg, was ninety days under treatment, while No. 16 was only thirty-five.

The second paper discusses Disease of the Hip-joint. We are glad to see that the veteran Surgeon takes a more cheerful view of this, alas! too common malady, than most writers; a change of opinion, he thinks, must proceed "from the disuse of counter-irritations and the establishment of perfect rest." Very true; but why should he hint that this is not the case in London? We believe "this salutary reformation" is even more general in London than in most other towns, and that since the publication of Sir B. Brodie's work on Diseases of the Joints, blisters, issues, setons, leeching, etc., have become almost obsolete. Mr. Syme considers that "nothing can be more preposterous than the common practice of administering iodine and mercury in such cases, or on other occasions when a strumous constitution is suspected." It is long since this was remarked about mercury; but surely we have yet to learn that iodine is not useful in some cases of strumous disease, taking for granted that neither it nor any other drug will be allowed to interfere with the food-taking powers of the patient. For a complete cure of morbus Coxarius, "the length of time during which the splint is required varies with the circumstances of the case, but in general does not extend beyond from *three* to *six* weeks." The only remark we hazard as to this statement is, that "we are glad to hear it." There are cases cited which prove that such is the case. The treatment has certainly no novelty; but it is indeed satisfactory to have its beneficial effects so well endorsed. Still we greatly fear that many cases will be found where nothing apparently avails to stop the march of disease over the frail body of our patient, and though we may attack it under even Professor Syme's experienced and encouraging generalship, our efforts will only result in disappointment and defeat. For the treatment of ununited fracture of the humerus, Mr. Syme lays down clear and simple, if not very original, rules:—

"When the morbid condition is too firmly established for being (*sic*) remedied by the mere enforcement of immobility, there should be no hesitation in resorting to the only other means really capable of overcoming the difficulty. This is, cutting off the broken ends of the bone, together with the ligamentous substance connecting them, so as to obtain two osseous surfaces, which may be placed in proper relation to each other, and then steadily maintained in it by the rigid pasteboard case, which should be prepared previously to the operation, and applied when the wound has ceased to discharge more matter than can be readily removed through an aperture in the covering.

"The incision should be on the outer side of the arm, and sufficiently free to afford ready access to the bone, which may be divided by a saw or the cutting *plyers* (*sic*). Any vessels requiring the ligature are then to be carefully tied, and the edges of the wound being stitched together, the arm requires merely the ordinary treatment of a compound fracture, by the support of two lateral splints, until it is ready for being placed in the case."

At present we can discuss this volume no further. There are many more interesting papers, but we cannot help expressing some regret at the constant ego-egomet*ism* to the exclusion of other good names (for instance, Martin's in connexion with the injection of iodine for the radical cure of hydrocele), the frequent sneers at our poor little village London, the Surgeons in the neighbourhood of this paltry settlement being even (see p. 217) without bougies or catheters; brains and skill, of course, no Symian expects them to have. But, as we said before, we are glad to have the volume, in spite of these little drawbacks. It is not every day that one born in a previous century freely gives his ideas to the younger portion of his Profession. We are glad to be told a good story by grandpapa, though he may box our ears now and then. Surely, however, some of the Professor's numerous aides might

have taken the trouble of correcting the press. It is provoking to see "*glateal* aneurism" appear five times on the fair, hot-pressed pages; but it may be right, and we poor benighted Londoners been wrong all this time when we spoke of gluteal arteries. In the meanwhile we thank M. le Professeur, *et au revoir*.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE USE OF THE THERMOMETER IN PRIVATE PRACTICE.

By Professor WUNDERLICH.

(Continued from page 327.)

17. The full practical worth of the thermometer can only be learned by those who will make regular observations throughout the course of the disease. For most cases in private practice an observation made twice a-day must suffice,—this being, however, always made at the same hours, between seven and nine in the morning, and between five and seven in the evening, being the hours best adapted for it. In the less important cases the Practitioner may make one observation himself and leave the other to the friends, if intelligent enough. This must be done, however, only as long as the observations correspond with those usually made in the disease, and are in harmony with the other signs of its course. As soon as notable deviations from these are observed, the Practitioner must take the instrument solely under his own control. A difference of one or two-tenths is not of any practical consequence. In prolonged and severe cases, an examination of the records of the temperature observed during its course, will call this to mind more effectually than the most detailed history. It is very convenient to exhibit the temperatures in the form of a curve, so that they may be rapidly appreciated. 18. Continuous thermometrical observation may teach us the laws of the course of fevers, and supply us with the most important basis for the formation of a judgment on particular cases. This is, in fact, the only means of ascertaining the normal process of development and recovery in febrile affections; and it is only when we are in possession of this knowledge that we are enabled to appreciate the effects of special circumstances in individual cases, and especially the influence of therapeutical procedures. This knowledge is only to be acquired by the repeated observation of numerous cases, in order that the essential may be separated from the non-essential. Such observations are scarcely possible elsewhere than in an Hospital, although they may also be supplemented and confirmed in private practice. The more general the study of thermometry becomes, the more numerous and well-grounded will be the general conclusions deducible from it. There is here, however, a danger; for although it is now at that period when it has to struggle for a recognition of its worth, another stage will soon arrive which is more to be dreaded even than its neglect and non-appreciation. The value of the practice becoming appreciated, it may be pursued with such indiscretion as to entail the greatest confusion, and render it difficult to ascertain really what is reliable. This is, however, the fate of all progress, and unwearied, independent observation is the only preservative. 19. Continuous observation of the temperature may of itself alone enable us to establish a completely certain diagnosis of the nature of the disease; and, at the very least, it supplies valuable material for this purpose, and frequently it is the chief or only means of deciding in cases of doubtful diagnosis. The statement that the diagnosis of many diseases (as ephemera, intermittent, typhus, variola, scarlatina, morbilli, acute rheumatism, erysipelas of the face, pneumonia, and pyæmia) may be established by observation of the temperature, may seem extravagant; but the author assures us that when he exhibits the curves of temperature to his clinical pupils, without informing them of any other particulars, in the great majority of cases the diagnosis which they make is correct. The characters of the curves in the respective diseases he has given in his former essay. He is far from employing this means of diagnosis alone, but resorts also to all other modes of inquiry; and he only adduces the fact of the sufficiency of observation of the temperature to exhibit what may be done by this method. But in instances of doubtful diagnosis, not only in the diseases already named, but also in various others (as meningitis, miliary tubercle, peritonitis, etc.), it is often the only reliable means. 20. Observation of the temperature during the course of a disease renders recognisible its periods and stages, and exhibits the point of transition from one stage to another. This is frequently the only means of distinguishing between the period of development or of recovery from a disease. 21. It exhibits in the most certain manner the degree of the disease, together with its changes, its improvements, and its aggravations. The diagnosis of the nature, locality, and stage of a disease, however desirable, may not be of much import in influencing the practical resolves of the attendant; but for him to be able to attain an exact measurement of the intensity of the disease is of the highest import. The temperature-curve is in this relation highly sensitive. In different diseases the limits of temperature, within which a severe or slight attack may be said to exist, vary. 22. The curve of the temperature indicates any irregularities in the progress of the disease, whether these may be dependent upon accidental circumstances or the operation of remedies. Once aware of the typical course of a disease and of its normal varieties, it is easy by means of the temperature to detect the irregularities of individual cases. This opens to us almost a new field of pathological inquiry with respect to the influences which tend to render the course of a disease irregular, and the changes referable to age, constitution, and the operation of remedial agents. The value of these last may be frequently tested by aid of the thermometer. 23. Observation of the temperature exhibits the precise point at which the diseased process terminates, and the degree of its completeness. It has not terminated so long as the normal temperature has not become established throughout all the periods of the day. 24. During convalescence the recurrence of a high temperature is commonly the earliest sign of a relapse or of a new disease, and sometimes it precedes the other symptoms by several days. The persistence of even an inconsiderable degree of abnormal temperature after apparent return to health, is a certain and frequently for a long time the only sign of incomplete recovery or of a secondary disease. Thus the temperature should be watched during convalescence, the thermometer being applied every other evening at the very least. As long as the temperature remains normal, nothing is to be feared, but every rise should act as a warning. It may be due to mere error in diet, leaving bed prematurely, etc., but in such cases the temperature soon sinks again on greater precautions being taken. 25. Observation of the temperature, either alone or in connexion with other symptoms, may indicate the near approach of death. On this one of two conditions may be observed. (1.) The temperature may rise continuously and considerably, reaching 33° or even 34°, and in such cases it not infrequently happens that after the apparent occurrence of death, it still continues to rise one or two tenths, the cooling of the body only taking place very slowly. (2.) Or, the temperature may become more or less moderated, while the pulse is increased in frequency and the other symptoms become more and more threatening. This diminution of temperature amidst conditions which do not harmonise with it, must be regarded as a pretty certain sign of approaching dissolution. 26. Sinking of the temperature below the normal point occurs under only a few conditions. It may announce a favourable crisis by preceding the return to a normal temperature. It is also met with sometimes during the morning remissions of remittents, and during the apyrexia of intermittents; in acute collapse, whether preceded or not by fever, in chronic marasmus, and sometimes on the approach of death. 27. A remarkable inequality in the distribution of the temperature over different parts of the body may occur during the shivering preceding fever; in collapse; in the agony of death; in severe affections of the chest or abdomen, and in partial paralysis. This fact is not of much utility for diagnosis or prognosis, but it requires to be known in order that erroneous conclusions may not be drawn.

Professor Wünderlich considers that the above considerations should suffice to show the practical value of the thermometer, and he can only compare the Physician who persists in treating febrile disease without it to the blind man guiding himself. By means of great practice and intelligence the latter will

often proceed rightly; but he will be much more frequently deceived, and will always have far more trouble and uncertainty in attaining the end, which is gained without effort by one in possession of his eyes. The industrious employment of the thermometer and an intimate acquaintance with the results are attended with this further advantage, that such practice and knowledge enable their possessor to judge of disease even without a thermometer with infinitely greater certainty. This is the case with all the exact methods of observation; and the paradoxical statement may be made that the thorough and industrious pursuit of auscultation, percussion, speculum exploration, and thermometry leads directly to the possibility of dispensing with these means in many cases. By means of auscultation and percussion our attention is drawn to numerous conditions of the thorax which enable us to make the diagnosis at the first glance, which heretofore it would have been impossible to have done, because such conditions would never have become recognised without the aid of physical diagnosis. Every well-instructed clinical student can in many cases diagnosticate the existence, situation, extent and stage of a pneumonia from the mere inspection of a patient, and can pronounce upon the existence of pleurisy, pneumothorax, emphysema or pulmonary tubercle. The initiated is frequently in such cases enabled to dispense with percussion and auscultation; but he never would have acquired this faculty had he not first examined numerous patients by these means of physical diagnosis, and have thus determined with exactitude the signification of the various conditions of form and movement exhibited by the thorax. It is the same with respect to admeasurement of temperature. The Physician well practised in the use of the thermometer, will, in hundreds of cases, without its aid, draw with certainty conclusions incomprehensible to others not so instructed; but if, led away by this skilfulness, he became induced to dispense with the thermometrical control, he would soon fall into gross errors.

Some persons while admitting the value of thermometrical exploration, advance objections to its employment in private practice:—1. The instrument necessary for delicate observations, it is said, would be difficult and expensive to acquire. This is a complete mistake. Any good thermometer of equal calibre, from the scale of which tenths of degrees can be easily read off, may be employed. Even if the graduation be not correct, the instrument will suffice if, on comparison with an accurate thermometer, the differences between the degrees are not found to be unequal. The price of such an instrument is moderate; and in private practice the attainment of the exactest accuracy is quite superfluous,—care being taken always to make the observation with the same instrument on the same patient. 2. The trouble of carrying a thermometer about, which has been objected to it, is only trifling; but it is better to have several of these instruments so as to be able to deposit one with any patient whose complaint may render frequent admeasurement desirable. Moreover, patients in good circumstances, who have become informed of the utility of the thermometer, may be easily induced to procure instruments of their own. 3. It is said that a well-employed Practitioner could never find the time for such circumstantial observations. This objection, which would be ridiculous if advanced against the speculum or stethoscope, is no more tenable for an instrument like the thermometer, which supplies information to be obtained in no other manner. Few, too, have so many bad cases on hand as to prevent their devoting from five to ten minutes (which in the vast majority of cases is amply sufficient) to the observation of such as require it, especially as the thermometer may be applied during the same time that other inquiries are being made. Nor is it necessary for the examination always to be repeated every day, and when the case is straightforward and no fever is present, it may be dispensed with altogether. The use of the thermometer may, moreover, save time, inasmuch that it may at once lead to conclusions only otherwise to be arrived at through multiplied questionings and examinations. 4. Objections, it is said, will be raised on the part of the patients. The same was formerly said of percussion and auscultation; but now most patients are dissatisfied if these means of investigation are not employed in their cases, so much has their necessity become known to the general public. The application of the thermometer is attended with no inconvenience; and the patients soon become highly interested in it. So popular indeed is this means likely to be, that the Author's only fear is of its becoming a tool in the hands of quacks and charlatans. 5. It can be only a half serious objection that is made when it is stated that a Practitioner who has become an adept in measuring the temperature will be likely to neglect more important signs of disease. This is a danger only in common with any special mode of investigation; and is to be avoided by those who adopt the maxim that no means of examining into the diseased organism is to be made light of. 6. Finally, the experienced Practitioner may object that the thermometer is for him a superfluity, because his hand has acquired so delicate a sensibility as to be able to appreciate, unaided, the temperature of the body. The self-deception here exhibited will soon be discovered if the sense be controlled by means of an instrument. A person much accustomed to these observations will frequently be able to state the temperature to within a few tenths; but it will not rarely occur, if his hand happen to be unusually hot or cold, that he will commit great errors in its appreciation. If comparison with the thermometer be neglected for a long period, the hand will be found to cause great deception as a means of measuring temperature.—*Archiv. der Heilkunde*, Vol. i., Pp. 386—416.

[Long as our abstract may seem, we have been obliged to leave unnoticed several of Professor Wünderlich's illustrations of his subject. Enough probably has, however, been said to call attention to a matter so forcibly dwelt upon by the author of the best work in Practical Medicine in the German language.]

FOREIGN CORRESPONDENCE.

RUSSIA.

St. Petersburg, August 19.

THE MEDICAL PROFESSION IN RUSSIA.

The extensive Empire of Russia contains a very large number of benevolent Institutions, Hospitals, Physicians, and other Medical persons; but in the interior and more distant provinces of the country, the proportion of Medical men to the number of inhabitants, is far less than it is in England, Germany, and France. It is a remarkable fact that most of the Physicians here are not Russians, but Germans, Poles, Swedes, and a few Frenchmen and Englishmen. As Russia possesses a large Polish province, several German provinces, and one which is half Swedish, it is only natural that there should be native Physicians in these provinces, but it is more striking, that the Russians themselves prefer foreigners to their countrymen as Physicians. The annual immigration of foreign Medical men is therefore very large, in spite of the national Russian movement which has of late taken place; and foreigners still occupy all the highest places in the Medical world. The Physician in ordinary to the Emperor Alexander I., was an Englishman, Dr. Willie, who founded the Medico-Chirurgical Academy of St. Petersburg; the Physician to the late Emperor Nicholas, was a Prussian, Dr. Mand, of Frankfort-on-the-Oder, one of the few who had a great personal influence upon that sovereign. The Physician to the reigning Emperor is a Swede, Dr. Hartmann; while the Grand Duchess Constantine has confided the care of her health to a Frenchman, Dr. Soulié, and the Medical attendant of her children is Dr. Buttig, of Saxony. The Physician to the Grand Duke Michael Nicolaiwitsch, is a German, Dr. Von Liebau; that of the Grand Duchess Helena, Dr. Arnett, of Austria, and so on. The same is the case with the public Medical appointments; thus the Presidents of the Medical Council, and the Chief Secretary for Medical Affairs in the Ministry of the Interior, Drs. Marcus and Otzolich, are both Germans; half the Medical Faculty of the Univerity of Moscow, the Medico-Chirurgical Academy, the Medical Council, consists of Germans, and one fourth of Poles. Almost all the Visiting Physicians to the Hospitals and benevolent Institutions of this city, are Germans. Even in the most distant provinces German Physicians reign supreme, and at this moment the Empress is accompanied in her tour through the Crimea, by Dr. Schmitt, a German Doctor, who is Medical attendant to a Russian Prince residing there.

The ways in which these foreigners enter the Russian

Empire and service, are very different. A great number were engaged during the Crimean war as Army Surgeons, who were at its close either retained as such, or received appointments in one of the two capitals, or in the interior of the Empire as Civil Physicians, or they began practice on their account. Others are continually imported by the Russian nobility, who travel abroad and are passionately fond of consulting all celebrated Doctors, or such as have once been celebrated; and who, on their return to their country, take pupils of noted Physicians with them as travelling or family Physicians. These live for some time in the country seats or the town-houses of their protectors, during which, they learn the Russian language, and make themselves somewhat acquainted with the peculiarities of the Russian public, the customs, and the laws of the land; they then often undergo an examination, and at last transmigrate to one of the large towns, where they begin practice on their own account; or the nobles with whom they have lived procure them public appointments. Thus, for instance, the Physician to Prince Scheremetieff, who resides with his patron, holds several public appointments. Others come here induced by the good fortune of their friends, or they come from the surplus Doctors of Germany to a country where there is not so much competition and not so much native talent as in their own fatherland.

The frequency of immigration, and the necessity for foreign Medical men, who are indispensable to Russia, have necessitated certain laws to regulate their settlement, their right to practise, and their claims to appointments. In order to make these laws intelligible, I must first say a few words on "Chin," or the order of rank in Russia. Every man living in this Empire is in service; that is, he has a nominal or real public appointment; with which a certain rank is connected, corresponding to the grades of military rank, ascending from the ensign to that of the field-marshal. It is true that the strictness of this rule has of late been somewhat relaxed, but only somewhat. Every three or five years a man advances; and only a few inferior places exclude advancement to the highest ranks. Thus the place of Professor and Chief Physician give a claim to that of State Councillor, but not to that of real State Councillor, who is accosted "Excellency." With the rank, rises and falls the pension, is the permission of appearing at court, connected as are also the title on being spoken to, the possibility of receiving orders, the authority with the public, even the amount of the Physician's fees.

There are two Medical examinations; one the so-called Lecker examination (*lökare* is Swedish, and signifies Physician), which gives the right to practise and invests a person with the tenth rank; and secondly, the examination for the Doctor's degree, which gives the title of M.D. and the eighth rank, as well as the possibility of rising to higher places. With reference to these Institutions, the following laws have been framed for foreigners:—

1. Foreign Physicians who are called to Russia, need not undergo any examination for receiving the *venia practicandi* and rank, which latter is generally distinctly mentioned on their being called here. This paragraph relates to those who are called here as Physicians to the Imperial household or as Professors to Dorpat, Moscow, and other Universities; as for instance, Dr. Mand, who was called to St. Petersburg as Physician to the late Emperor Nicholas, and Professor Heyfelder, the father, who was called here as Chief Surgeon to the army of Finland.

2. Foreign Physicians who have made themselves famous by writings or great cures, may receive the permission to practise from the Medical Council, either at once, or after undergoing a colloquium in the Council. One of the assistants of Professor A. Von Graefe, of Berlin, who visits the interior of Russia every year, and there makes many operations, had to undergo such a colloquium before he received permission to practise. This colloquium may be held in Russian, German, French, or Latin.

3. Young Medical men who are not yet known to fame, may they be Doctors or not, must undergo one of the two examinations just alluded to, at a Russian University, or at the Medico-Chirurgical Academy, St. Petersburg.

As Dorpat is a purely German, and Helsingfors a purely Swedish University; as there is a Medico-Chirurgical Academy at Warsaw, and the examinations may take place at Moscow and St. Petersburg, either in Russian, German, French, or Latin, it is evident that the law is liberal enough in this particular, which would probably not be the case if the State did not require foreign Medical aid. If many a Doctor *rite promotus* undergoes here a second examination, this is done more on account of the claims to rank, position, etc., which are attached to a Russian diploma, than that his former degree is not recognised. A great number of natives acquire the right to practise by the Lecker examination, but they have not the title of Doctor, and never obtain it, with the exception of a few, who undergo the second examination at an advanced age, when they wish to be eligible for the place of Chief Physician and others.

I will use this opportunity to say a few words on the foreign Medical men, who were engaged as army Surgeons during the Crimean war, of whose dissatisfaction at the close of that war you have no doubt heard. They had been engaged with a comparatively good salary, and the promise that the military appointment should be continued to them at the close of the war, with the option of beginning practice on their own account, or of returning home. Not a few of them believed that after their services were no longer required, they would receive pensions on leaving the army; but this had by no means been promised them, and was therefore not done; only such as had become invalid, and the widows or even the mothers of those killed during the war, received a pension. Others left the Army Medical Department, and believed themselves entitled to lay claim at once to civil appointments. But they had only been promised the licence to practise within the whole Empire, and if they wished to lay claim to promotion, rank, etc., they were required to undergo the usual Russian examination. This was quite in accordance with the letter of agreement, and was certainly partial to these gentlemen if compared with the laws regulating the practice of foreigners generally which I have quoted above. Of course, this was not very obliging to those who had helped the State in time of distress; for so high an authority as M. Pirogoff has assured me that the number of Russian Army Surgeons was quite inadequate at the time. But the reproach made to the Russian Government that it had not kept word, is certainly unfounded. The only conclusion to be drawn from these occurrences is, that those who enter foreign service will do well to satisfy themselves beforehand most accurately as to the laws existing in the country, and to the letter of the agreement before they sign one.

GERMANY.

Wuerzburg, September 10.

ON SCLEROSIS OF THE SKIN IN THE ADULT.

The number of cases of sclerosis of the skin which have been observed in the adult is very limited, and an anatomical examination of the skin thus affected has never been made till now. This was lately done by M. Foerster, Professor of Pathological Anatomy at this University; and I to-day proceed to give you a description of the case, which is interesting on account of its novelty. This affection, when occurring in the adult, seems to be essentially different from that observed in newly-born infants. In both cases the change consists in the skin losing its softness, elasticity, and mobility, and becoming hard as a board and immovable. In newly-born children, however, this condition is caused by infiltration of serous liquid in the meshes of the cellular tissue, by which its tension is increased. Besides, the fat is in infants peculiarly hard, and in scleroma it becomes even firmer than it was before, probably through some chemical alteration, the exact nature of which is at present unknown. In the adult a serous infiltration of cellular tissue cannot cause hardening of the skin, and it appears that in this instance the affection is caused by an excessive growth of cellular tissue, by which the stems of the meshes are thickened, the meshes themselves filled up, and the connexion of the cellular tissue, and the corium and the parts below them, viz., the muscles, tendons, and fasciæ, are tightened.

The following are a few particulars of the case observed by Professor Foerster:—A labourer, aged 22, was received into the Julius Hospital for an ulcer on the anterior surface of the lower third of the right leg. The ulcer did not spread very far nor deep, but was remarkable for the surrounding parts of the skin being sclerosed. After the ulcer was healed, the patient was discharged, although the hardening of the skin

had not disappeared. About nine months afterwards he again came into the Hospital, as the scleroma was further developed, and new ulcers had come on. Death from tuberculosis of the lungs ensued two months afterwards. The course of the sclerosis had been as follows: it first proceeded from the neighbourhood of an ulcer on the right leg, and from thence spread over the whole anterior surface of the leg, foot, and thigh. After some time the anterior part of the left lower extremity became also affected. The hardening spread from there, without attacking the loins, to the abdomen, the anterior and lateral parts of the chest, and the upper extremities; the anterior sides of which, the back, the neck, and the head, were not affected, these parts being only of a dirty white colour. The sclerosed skin gradually became tough, hard as a board, immovable, and of a dark colour, while perspiration and sensation soon entirely ceased. On most places, this condition, after having reached a certain stage, remained stationary, but on others—for instance, on both sides of the thorax—retrogressive metamorphosis took place, and the skin recovered its normal state. On many parts shallow ulcerations came on, the skin began to perspire, the epithelium peeled off, the secretion ceased, and the parts became dry, smooth and white.

The microscopical examination made after death showed that the papillæ on these places had entirely disappeared, and the surface of the corium was therefore quite smooth. The epidermis was thin, but otherwise normal; the deepest parts of the rete mucosum, which on other places contained much pigment, were colourless in these. On other parts, especially in the extremities, there were deep ulcerations of the corium, generally of small extent, which remained unchanged until death, or healed, and a firm fibrous and contracting cicatrix was formed. Above the sternum and the clavicle the skin was 3‴ thick, and hard as a board; on the abdomen it was 1½‴ thick, and on the extremities 2 to 3‴. It was as difficult to cut as the sole of a boot. The connective tissue of the corium was thickened and hardened; the subcutaneous cellular tissue was not atrophied, but had also become firm like the corium. The morbid process had been quite similar to that of sclerosis of the bones. At first the fat had quite disappeared from the meatus of the cellular tissue, and only in the microscopical preparations a few fat cells could be distinguished between the layers of connective tissue. The loose connective tissue had become quite firm. The elastic fibres of the skin and the subcutaneous cellular tissue were equally changed, with the exception of those places where cicatrices had been formed. The papillæ, the glands, and hair had also retained their normal height and width, and the capillary vessels of the skin appeared to be quite normal. Very few nerves were to be seen, they being evidently covered by the growth of the connective tissue.

The case was, therefore, one of a chronic excessive formation of connective tissue, unaccompanied by fever or local inflammatory symptoms, proceeding from a small point, and from thence spreading almost over the whole of the body. The cause was unknown; and as ulcers and excoriations were observed in the whole course of the illness, it is very probable that the ulcer on the right leg, in the neighbourhood of which the sclerosis was first observed, was preceded by the affection, so that it was not primary, but secondary.

Berlin, September 12.

THE OBSTETRICAL SOCIETY.

Some time ago an interesting discussion took place in the Obstetrical and Gynæcological Society of this city, which I will communicate to you, as it may serve to induce the Obstetrical Society of London to take up the same subject. The Society just mentioned, which has existed for many years, was founded by our celebrated gynæcologist, Carl Mayer, who, with Scanzoni, ranks first among the obstetrical and gynæcological authorities of Germany. It counts as its members the most eminent obstetricians of Berlin, and the discussions which take place in it are distinguished for their avoidance of all theoretical speculations, and for continually keeping in view the practical purpose—the experience of the day being related in a short and intelligible manner. The discussion to which I refer concerned the signs and consequences of masturbation in young girls, especially previous to completely developed maturity. The occasion for it was the experience made by a Physician to one of the public Educational Institutions, in which a number of girls had begun to look pale, sickly, and worn; they became shy, convulsions now and then took place, and yet the general *régime* did not show any cause why the health of the girls should be thus deteriorated. The strange events which took place in Elberfeld, and which were described to your readers by your correspondent in that city (*Medical Times and Gazette* of March 9, 1861), were fresh in the recollection of the Physician to this Institution; and he therefore considered it to be his duty to do all in his power to discover the cause of the symptoms mentioned, and to prevent further mischief. He thought it possible that masturbation, which is unfortunately such a very common vice in schools, might be the cause, and endeavoured to satisfy himself by an examination of the genitals, whether his suspicions were well founded or not. This he undertook with the assistance of a colleague of great experience in such examinations. About fifteen girls were thus examined; whereupon the authorities, on being informed of it, addressed a strong reproof to the Physicians, believing it to be a violation of decency; and without heeding the assertion that the examination had, in fact, shown such changes in the genitals as led to the conclusion that masturbation had been carried on.

In order to obtain, if possible, a confirmation of his opinion, the Physician just mentioned wrote to M. Scanzoni, of Würzburg, and M. Credé, of Leipzig, and asked for their experience in this particular. Both Professors returned the answer, that they had no experience in this matter. The Gynæcological Society of this town then took up the subject, and fully discussed it in several meetings. Drs. C. Mayer, Martin, Krieger, Leubuscher, Ebert, Goeschen, and others took part in the discussion, and the views expressed by them on these occasions will be published in the *Transactions* of the Society. The result was that according to the experience of the Society, the condition of the genitals did not afford a satisfactory clue as to whether masturbation had been practised or not. Neither the opening of the introitus vaginæ, nor an abnormal development of the nymphæ and of the clitoris, nor a reddening and loosening of, nor any considerable secretion of mucus by, the mucous membrane of the vagina, were decisive proofs of it. All the speakers agreed, that it is very difficult to obtain direct experience in masturbation in young girls, and the literature on the subject which has been specially studied by a committee of the Society proved to be very bare in trustworthy and reliable evidence.

The experiences made by gynæcologists almost exclusively concern women, in whom the irritation which induces them to practise masturbation is often the consequence of previous disease of the womb, or of incomplete unsatisfactory connexion consequent upon impotency of the husband. Thus C. Mayer related many cases from his large experience, but he did not feel himself justified in assuming a peculiar state of the external genitals to be characteristic for masturbation only. M. Leubuscher related his experience in the workhouse of Berlin, where young girls of twelve and fourteen years of age, who have already become prostitutes, are brought. The external examination of the genitals in these girls gave the same results which have been believed to be due to masturbation. M. Ebert, Physician to the wards of sick children in the Charité Hospital, and who sees many cases of diseases of the women, had also been unable to recognise masturbation by the signs of irritation usually mentioned as pathognomonic symptoms of it. Many of the speakers laid stress upon the nervous symptoms, which may come on in girls addicted to this vice; but their very nature, and the possibility that they may be dependent upon spontaneous diseases of the genitals, precludes us from considering them as satisfactory proofs of this deleterious practice. It is, therefore, certain that only a complex of all the symptoms taken together, and not one singly, is sufficient to lead us to a diagnosis. The whole subject is of so delicate a nature, and the moral feelings may, by rude and unskilful management, really be so greatly shocked, that under any circumstances only very few Medical men will be able, by their particular position, to gain a full insight into this matter. It is, therefore, all the more important that general attention should be directed to it, as the scanty experience which is at hand on a subject of so great moment for Medical pædagogics, should be fully elicited wherever it is possible.

I conclude this letter by mentioning that M. Carl Mayer recently showed the Society an apparatus for lighting up the

internal genitals on examination, similar to that used in laryngoscopy (parabolic glasses). In the short days during winter, in large establishments, where many persons have to be examined, it may be of great use, but it seems scarcely necessary in private practice.

DENMARK.

Copenhagen, September 28.

THE LUNATIC ASYLUMS OF DENMARK.

The improvements which have within the last twenty years taken place in the construction and management of the public lunatic asylums of this country, are such as to entirely remove an opprobrium which still adheres to many States of the Continent. In former times here, as everywhere else, the chief aim in this respect was not so much the comfort and cure of the unfortunate patients as the providing for the security of the non-insane, and it was only after the conviction that insanity is frequently curable, had become more general among Medical men, that a more rational method of treatment came to be adopted. Ten years ago, the St. John's Hospital at Bidstrup, about sixteen miles from the capital, was the only public asylum in Denmark, and this in no way sufficed to the requirements of the age. For a number of years the late Dr. Hübertz was the chief mover in the agitation for effecting an improvement in the condition of the insane, and after his death, the great impulse of reform in this department proceeded from an Association of a few young Physicians, called Philiatria, which in 1846 sent up certain proposals for a reform in the treatment of lunatics to the Chamber of Deputies. The Chamber treated the matter lightly, for which it was severely criticised by the Society just mentioned; and in order to keep the movement going, the Philiatria proposed a prize essay "On the General Principles to be Adopted in the Treatment of the Insane." The prize was gained by Dr. Selmer, in 1846; his essay was printed at the expense of the Popular Society for the Liberty of the Press; and it was distributed gratis all over the country by thousands of copies, so that the lunatic question became a matter of public importance. The Government then vigorously took it up, the necesary funds were voted by the Chamber; and the site for a new asylum was chosen in the neighbourhood of Aarhus, in Jütland. The erection of the building was, however, retarded by the war with Germany, which broke out in 1848, and the asylum was not opened until the 1st of September, 1852. This very large establishment, which is construeted in complete accordance with modern principles, consists of a central part which is devoted to the administration and the economy; and of two lateral parts. The centre is formed of four buildings, which enclose a large court, and the largest of which is immediately connected with the lateral parts. These latter are built zig-zag, the northern wing being devoted to the male, the southern to the female patients. The aspect of the chief façade is S.E.S.; it affords an extensive view of the sea and the neighbouring islands, and is 225 yards long. The whole extent from north to south is 310 yards, from east to west 120 yards. The building is 8900 yards from the beach, so that the patients may have the benefit of sea-bathing; on the other side it is surrounded by fields and forests. The whole establishment covers an area of about fifty-seven acres, and it is therefore easy to occupy the inmates with agricultural and horticultural pursuits. A rivulet which runs through the place furnishes the necessary water, which is carried by pipes through the lower story of the building. The asylum was originally appointed for the insane from Jütland only, but lunaties from other parts of the kingdom as well as foreigners, are now received into it. At first the space was merely sufficient for 130 inmates, and only such patients were received in it as afforded a fair hope of recovery, two years being the maximum they were allowed to remain in it. By a later order, however, incurables were also to be received into it, and the building having been enlarged, it is now capable of holding 930 patients. The same liberal spirit with which the chamber voted the necessary funds, was shown in the regulations for the economy of the establishment; the payment required of the three classes of native patients is so small, that it by no means covers the expenses. Poor patients who are natives of Jutland are treated gratis for the first three months, on condition that they are brought in before the disease has lasted for two months, and afterwards they pay about £5 10s. annually. This regulation is very beneficial, as the relatives are thereby induced to send the patients in at an early stage of the complaint, when they may be treated in accordance with the rules of the art, and at a distance from their homes, almost immediately after the commencement of the disease.

The direction of this establishment is confided to a Chief or Resident-Physician and two directors for the Household. The Chief Physician, however, has, as is also the case in other Hospitals, absolute discretion in everything concerning the moral and physical treatment of the inmates, and is in fact invested with dictatorial power from which there is no other appeal than to the Royal Board of Health, or to the Ministry. He is not under the necessity of disputing every inch of ground with a Visiting Physician. He is an *employé* of the Government, receives a salary as such, and has claims to a pension as every other servant of the State. Two Assistant-Physicians also live in the Asylum.

During the first six years of its existence this Institution has received 495 patients, of which 36 had come in several times. On an average 40 per cent. of the patients belonged to the class mentioned above, which pays £5 10s., annually. The cost of the whole establishment, as it now stands, has been £60,000.

The second public Lunatic Asylum of Denmark was opened on April 3, 1858, and was erected at an expense of £40,000. It is situated in a delightful neighbourhood on a small peninsula near Vordingburg in the southern part of Zealand, and affords accommodation for 120 patients, natives of the Danish islands, with the exception of Copenhagen; but it is to be enlarged so as to be able to take in 840 incurables. The area of this establishment, including park and gardens, is twenty-six acres, but the landed property belonging to it is five times that extent. The building forms a rectangle, with two wings on each side. This rectangle consists of five separate buildings for the administration, the economy, the church and saloon for festivals. The lateral wings on each side consist of four buildings which are connected with each other and the principal building, in such a manner, however, that the patients are separated not only from the central building but also from the extreme building, viz., the cells. Each of the eight Hospitals is therefore quite distinct and there are four compartments for either sex. One of these is destined for quiet lunaties of the first class; a second for quiet lunaties of the second class; the third for restless and unclean patients, and the fourth contains cells. Each compartment has also its separate bed-rooms, drawing-rooms, dining-rooms, depôts, infirmaries; and there is also a room for prayers, which the compartments of the first and second class have in common. Even the court-yards and gardens are quite distinct from each other. The rooms are all five yards high, each one containing 1400 cubic feet; in the common bedroom each individual has a space of 6·700, in the drawing-room 500 and the dining-room 200 cubic feet. The newest technical and mechanical contrivances are everywhere employed in the economy of the Institution. The kitchen, the laundry, the drying-room, are all worked by steam; there is also a steam-engine for supplying the establishment with water; and a complete system of sewers, the contents of which are discharged into the sea at a distance of 350 yards from the Asylum. This is situated on an elevation, and the firm and dry soil is very favourable in a sanitary point of view. In every other respect, the same regulations exist here as in Aarhus; viz., there are three classes, in the first class the patients are treated gratis for the first three months, provided the disease has only lasted two months before they are brought in; and those of the second class are not only fed and sheltered, but also clothed. The direction is composed in the same manner, and the Chief or Resident-Physician is President of the Committee.

The third public lunatic asylum of the kingdom is the St. John's Hospital, at Bidstrup, which I mentioned in the commencement of this letter. This institution belongs to the City of Copenhagen, and mostly receives patients from the capital and the North of Zealand. The older parts of the building are now only used for incurables, since a very fine new asylum has been added to the old one, at the expense of the city, in 1859, and which has room for 120 curables. The buildings, which are situated on an elevation with a view of

the sea, form a cross in the middle, the northern wing of which contains the apartments for the Physician and for the Directors, and a saloon for festivities. The southern wing contains the kitchen, the bureau, the officers' rooms, room for prayer, and the library. The chief staircase is in the middle, and from this long corridors proceed towards the adjoining eastern and western wings of the cross, each wing being devoted to either sex. These wings, again, consist of several smaller buildings, of which one is for twelve quiet patients from the upper classes, another for baths, billiards, and music, and another for twenty-two quiet patients from the lower classes. The extreme building is destined for sixteen restless and unclean patients; this also contains the baths for the second and third class, and ten cells for noisy and maniacal patients. Between the different compartments the water-closets are put on. Every compartment has its own court-yard, and the first and second have also separate gardens. The water is carried from a reservoir by means of tubes throughout the building, which is 700 yards in length and 15 yards wide.

Finally, I have to mention the Establishment for Idiots, which is wholly supported, as it was founded, by private benevolence. This tasteful building, the chief façade of which is seventy yards long, was opened last year, and is destined for sixty idiotic children, who find there such mental and bodily occupation as is most suitable for their organisation. A smaller establishment of this kind, which had already existed for six years, is now amalgamated with this larger one, and the old building is now used for old and incurable idiots. The building consists of a centre and two wings. In the basement are situated the kitchen and servants' offices; the directors' and master's apartments are on the ground floor, where are also the dining-room, a room for gymnastic exercises, and workshops. The first floor contains the school, bed-rooms, bath-rooms, the apartments of the director, and the library. All these rooms are six yards high. The second floor contains sick-rooms and baths. As this establishment is only one mile distant from the capital, it has the advantage of gas and water-works; it is surrounded by gardens, and, being close to the beach, there is every facility for sea-bathing.

In conclusion, I may say that the Government, the civic committees, and private benevolence, have, during the last ten years, emulated each other in rendering the treatment of the insane as humane and judicious as possible, and affording them all the benefits of the progress of science and civilisation.

GENERAL CORRESPONDENCE.

BRAINLESS INFANT.

Letter from Dr. James C. L. Carson.

[To the Editor of the Medical Times and Gazette.]

Sir,—Some time ago I attended a lady in her thirteenth confinement. The infant was as perfect and as well-developed as any one I ever saw with the exception of the brain, which was wanting. The face was plump and full, and the head had its full breadth up to and at the base of the skull. From the level of the eyebrow, the root of the ear, and the seat of the cerebellum it presented the exact appearance of a skull which had been sawn across on this low level in the dissecting-room, only that the base of the skull was all covered by skin. It was quite flat across. It was a head presentation, and the child freely moved its legs and arms and twisted the muscles of its face while it lay on the bed before the cord was divided; but it never succeeded in drawing a breath. I was afraid it was going to live on, and was thankful to see it had not the power of commencing respiration.

Now, this case appears to me to present three points of interest:—1. The sight of it, and a melancholy one it was, convinced me that there is very little in physiognomy when the phrenological part, the brain, is taken out of it. 2. The nature of the presentation assists in corroborating the views regarding the gravity of the head as a cause of the position of the fœtus in utero, which have been set forth by Professor Simpson in his wonderfully instructive and altogether incomparable obstetric works. 3. The distinct and very perceptible motions of the child after birth, although it never breathed, proved unequivocally that an infant may be born alive notwithstanding its incapacity for respiration, and therefore should be sufficient to settle the law point which was lately discussed in the Courts regarding the title to property which depended on the child being born alive, and which case was reported in your pages.

I am, &c.

James C. L. Carson, M.D.

Coleraine, Ireland, September 28.

ANIMAL TEMPERATURE.

Letter from Dr. Tripe.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a communication from abroad, which appeared in your Journal on September 28, it is stated that the average temperature of the human body is 98·5° F., and that a departure from this temperature of more than a few tenths of a degree, is a certain indication of ill-health. Now, as my experience is decidedly opposed to this statement, I am induced to call the attention of your readers to the subject.

The most convenient and most certain mode of conducting such an inquiry, is with a small and very delicate maximum thermometer, so that the highest temperature reached may be seen after the instrument is removed from the tongue or axilla. I prefer placing the thermometer under the tongue, and closing the lips rather firmly upon it. The results of my experiments show that the temperature under the tongue may vary from 96° to 99° F., in persons in health. Indeed, if I remember aright, in some trials which were made at Zermatt in my presence, a few weeks since, the range extended from 95·0° to 98·4° F.

There is also no correspondence between the frequency of the pulse and the temperature of the body. Thus, in a healthy person whose pulse was only 48 per minute, the temperature was 98·2° F., whilst in another whose pulse was 80 per minute, the temperature was only 96·0° F. The same thermometer was used in these two experiments; they were made at the same time, and in a precisely similar manner. I believe, however, that where the temperature rises above 99·5° F., illness may be expected, unless the heat of the person experimented on should be decidedly above the standard which I have found to be usual in health. An increased temperature, such as we meet with in fever, must not be looked on as indicative merely of increased oxidisation going on in the body, but often arises from some causes which prevent the cooling of the body, such as diminished escape of the watery vapour, *i.e.*, diminished evaporation. The subject is full of interest, and will well repay extended observation in connexion with the temperature and humidity of the air, different periods of the day, after short and long-continued exercise, and on many other points.

I am, &c. John W. Tripe, M.D.,

Medical Officer Health, Hackney.

Commercial-road, October 5.

NAVAL SURGEONS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Some readers of the Students' Number of the *Medical Times and Gazette*, under the heading of "Naval Medical Regulations," may be unaware of the degradation that has lately befallen our class, and if they are not well informed, they may be greatly disappointed.

By Admiralty Circular, dated May 7, on Relative Rank, all Surgeons promoted after March 28, 1861, rank *with* but *junior to* major. Moreover, as the Surgeon grows older in the service, his advancement to higher rank is computed only by number of years served on full-pay, whereas, every other class of officer in the Navy obtains rank by seniority. This is now a cause of great injustice to Surgeons of and above fifteen years' seniority, unable to complete twenty years' full-pay time to qualify them to rank as Lieut.-Colonel, not from any fault of their own, but in many instances the result of ill-health contracted while serving on foreign stations; and who is so liable to this as the Surgeon?

The Circular on Uniforms, just issued by the Admiralty, exemplifies this, for by it the embroidered peak of the cap is taken away from the Surgeon and given, together with a third

stripe on the cuff, to his more fortunate messmates, the Paymaster and Chief Engineer of fifteen years' seniority, who count half-pay time as well as full-pay, which is denied to the Surgeon, and thus he is degraded, not only in his own eyes, but in that of the ship's crew.

I am, &c.

A Surgeon above Fifteen Years' Seniority.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, October 3, 1861 :—

Bubb, John, Cheltenham
Gambier, Thomas.

The following gentleman also on the same day passed his First Examination :—

Prater, Charles Augustus, Thomas-street, Woolwich.

St. Thomas's Hospital.—Distribution of Prizes and Appointments for the past Session :—

THIRD YEAR'S STUDENTS.

J. W. Hicks, Lower Clapton ..	College Prize	£30 and Hon. Certificate.
J. Fowler, Winterton	Ditto	£20 and Hon. Certificate.
J. V. Bell, Rochester	Ditto	£10 and Hon. Certificate.
J. Lees, Wolverhampton		Hon. Certificate.
M. C. Grabham, Islington		Hon. Certificate.
W. F. Hunter, Margate		Hon. Certificate.

SECOND YEAR'S STUDENTS.

J. F. Deck, Nelson, New Zealand..	College Prize	£30 and Hon. Certificate.
G. Pearce, Salisbury	Ditto	£20 and Hon. Certificate.
F. G. Brown, London	Ditto	£10 and Hon. Certificate.
D. Biddle, Wooton-under-Edge ..		Hon. Certificate.
H. G. Shea, London		Hon. Certificate.
T. J. Jefferson, Hull		Hon. Certificate.
J. D. Swallow, Reading		Hon. Certificate.

FIRST YEAR'S STUDENTS.

C. A. Greaves, Derby	Treasurer's Prize	30 Gs., and Hon. Cert.
F. H. Gervis, Tiverton	College Prize	£20 and Hon. Certificate.
E. Sutcliff, Camberwell	Ditto	£10 and Hon. Certificate.
J. Whitehead, Preston		Hon. Certificate.
J. Morton, Holbeach, Lincoln ..		Hon. Certificate.
J. P. Way, Portsmouth		Hon. Certificate.
T. Britton, Doncaster		Hon. Certificate.
J. P. Purvis, Greenwich		Hon. Certificate.
R. J. Scott, Omagh, Tyrone ..		Hon. Certificate.

MATRICULATION PRIZES.

Classics and Mathematics.

H. Summerhayes, Crewkerne ..	President's Prize	20 Gs. and Hon. Cert.
F. P. Atkinson, Kew		Hon. Certificate.
J. P. Purvis, Greenwich		Hon. Certificate.

Modern Languages and Modern History.

H. Summerhayes, Crewkerne ..	College Prize	£20 and Hon. Certificate.
C. A. Greaves, Derby		Hon. Certificate.

Physics and Natural History.

H. Summerhayes, Crewkerne ..	College Prize	£10 and Hon. Certificate.
F. H. Gervis, Tiverton	Ditto	£10 and Hon. Certificate.
E. Sutcliff, Camberwell		Hon. Certificate.

THE WILLIAM TITE SCHOLARSHIP,
Founded by Wm. Tite, Esq , M.P., F.R.S.

H. Summerhayes, Crewkerne .. Scholarship—The interest of £1000 Consols, tenable for 3 years, and Hon. Certificate.

CERTIFICATES OF HONOUR TO THE PHYSICIANS' CLINICAL CLERKS.

J. H. Armstrong	J. F. Deck	H. G. Shea
W. Adams	R. P. Fouracre	J. H. Swallow
J. J. Barrett	J. Gimblett	P. C. Shepheard
D. Biddle	E Goddard	A. Towne
F. G. Brown	C. M. Kempe	C. A. Waterworth
A. G. Cox	G. Pearce	

CERTIFICATES OF HONOUR TO THE SURGEONS' DRESSERS.

J. H. Armstrong	T. Corbett	F. S. La Trobe	J. D. Swallow
J. J. Barrett	J. F. Deck	W. Payne	A. Towne
D. Biddle	J. Gimblett	G. Pearce	C. A. Waterworth
F. G. Brown	E. Goddard	H. G. Shea	
A. H. Clay	C. M Kempe	P. C. Shepheard	

PHYSICAL SOCIETY.

J. W. Hicks, Lower Clapton	Soc. 3rd Year's Prize & Hon. Certificate.
J. F. Deck, Nelson, New Zealand	Soc. 2nd Year's Prize & Hon. Certificate.

RESIDENT ACCOUCHEURS.

I. H. Hooper, Upton Warren ..	Hon. Certificate.
S. Chater, Hampstead	Hon. Certificate.
J. V. Bell, Rochester..	Hon. Certificate.

SURGICAL AND ANATOMICAL MEDAL.

J. W. Hicks, Lower Clapton .. Cheselden Medal, founded by George Vaughan, Esq.

FOR GENERAL PROFICIENCY AND GOOD CONDUCT.

J. W. Hicks, Lower Clapton .. Treasurer's Gold Medal.

APPOINTMENTS.

Cossar.—Thomas Cossar, M.D. Univ. Edin., L.R.C.S. Edin., L.S.A. Lond., has been elected Medical Officer for the Hurworth District of the Darlington Union, Durham, vacant by the death of Thomas Dixon Walker, L.S.A. Lond.

Davies.—Edward Davies, M.D. St. And. (Exam.), M.R.C.S. and L.M. Eng., L.S.A. Lond., L.M. Rot. Hosp., Dublin, has been appointed Surgeon to the Wrexham Infirmary, Denbighshire, in the place of Mr. William Rowland, resigned.

Ferguson.—John Creery Ferguson, M.B. Univ. Trin. Coll. Dub., Lic., Fell. and Hon. Fell. K.Q.C.P. Irel., on retiring by rotation as one of the Physicians to the General Hospital, Belfast, has been re-elected.

Gordon.—Alexander Gordon, M.D. Univ. Edin., L.R.C.S. Edin., on retiring by rotation as one of the Surgeons to the Belfast General Hospital, has been re-elected.

Griffith.—James Griffith, L.S.A. Lond., has been appointed Medical Poor-Law Officer for the Biddenden District, in the Tenterden Union, Kent, vacant by the resignation of Peter Pinyon, M.R.C.S. Eng., L.S.A. Lond.

Rowland.—William Rowland, Fell. and M.R.C.S. Eng., L.S.A. Lond., L.M. Dub., on resigning the post of Surgeon to the Wrexham Infirmary, has been appointed Consulting Surgeon.

DEATHS.

Clayton.—Recently, William Clayton, Surgeon R.N., on the retired list (seniority March 1, 1810).

Godfrey.—September 27, at 24, Park-street, Bristol, J. Godfrey, M.D., F.R.C S., Senior Surgeon to the Bristol General Hospital.

Hanan.—October 4, at Sunlodge, County Cork, Denis Hanan, M.D.

Macaulay.—October 4, Thomas Macaulay, of Leicester, Fell. and Mem. R.C.S. Eng., L.S A. Lond.

Martin.—August 15, Thomas B. Martin, Assistant-Surgeon of H.M. screw steam-sloop *Racer*, on the West India Station (seniority June 18, 1855), aged 26.

Meade.—At Ballymartle, Horace Townsend Newman Meade, of Queenstown, Cork, M.D. Univ. Trin. Coll. Dub., Fell. and L.R.C.S. Ireland, L.M. Dublin Lying-in Hospital.

M'Grath.—Recently, Michael M'Grath, Assistant-Surgeon of H.M. screw steam-frigate *Curacoa*. (Seniority March 9, 1854.)

Morrin.—August 24, Joseph Morrin, of Quebec, M.D., aged 67.

Philip.—At 17, Great Coram-street, Russell-square, St. L. Philip, of Trinidad, West Indies, M.D., aged 56.

Prince.—October 3, John Prince, of Balsham, near Linton, Cambridgeshire, M.R.C.S. Eng., L.S.A. Lond., aged 63.

Rogers.—Recently, John Rogers, Assistant-Surgeon (act.) R.N. (Seniority November 13, 1860.)

Wise.—Recently, Charles F. Wise, Assistant-Surgeon H.M. screw steam gun-vessel *Jasper*. (Seniority July 19, 1858.)

A Royal Victim of Cancer.—The *Patrie* publishes some details of the death of the Queen of Madagascar, Ranavalo. She had been suffering from a cancerous disease for more than a year, and had submitted to a severe operation ; but the disease re-appeared three months afterwards, and her European Surgeon warned the Royal family that recovery was hopeless. The Queen died on August 18. She had entered her seventieth year.

Idiot Asylum, Colchester.—Dr. Duncan having left Colchester, there is a vacancy in the appointment for Medical Officer at the Idiot Asylum. We trust the committee having the appointment to make will keep free from any personal or local interests, and, faithful to their trust, elect a gentleman of experience, one who, by the exercise of kindness and judicious control, will have a happy influence in promoting the comfort and improvement of the poor inmates.

The personalty under the will of the late Richard Frankum, Esq., F.S.A., F.R.C.S., etc., who died in August last, has been sworn as under £12,000. In the course of a long Professional career he amassed a large fortune, real and personal. He left legacies to the London Hospital and King's College Hospital, and many other charities. A portion of his fine collection of pictures is to be presented to University College.

Pharmaceutical Society of Great Britain.—The first two Jacob Bell Memorial Scholarships, value £30 a-year each, with free Laboratory instruction, have been awarded by the Council to Thomas W. H. Tolbort, pupil of Mr. Froud, Chemist, Dorchester ; and William A. Tilden, pupil of Mr. Allchin, Chemist, Barnsbury-road. Botanical Prize Medals for the two best Herbaria to James Browne and Joseph H. Richardson. Sessional Prize Medals to Thomas J. Hasselby, for Chemistry and Pharmacy, and Frank H. Lescher, for Botany and Materia Medica.

Liverpool Royal Infirmary School of Medicine.—The Introductory Lecture of the present Session was delivered on October 1, by Mr. Fletcher, and the prizes of

last Session distributed by John Cropper, Esq., as follow:—Medicine: Mr. G. S. Kenyon, certificate of honour. Surgery: Mr. Thomas Bird, medal. Anatomy, senior class: Mr. G. B. V. Nash, medal; Mr. W. Hanks, certificate of honour; Mr. G. S. Kenyon, certificate of honour. Anatomy, junior class: Mr. Clarence Visick, medal; Mr. J. C. Rossellotz, certificate of honour. Chemistry: Mr. G. S. Kenyon, medal; Mr. Wm. Cross, certificate of honour; Jos. Warburton, certificate of honour. Practical Chemistry: Mr. Wm. Cross, book prize; Mr. C. Parks, certificate of honour; Mr. T. D. Leigh, certificate of honour. Special Chemical Prize for *vivâ voce* examination: Mr. Jos. Warburton. Midwifery, etc.: Mr. G. B. V. Nash, medal; Mr. R. H. D. Johnson, certificate of honour. Materia Medica: Mr. J. Bradley, medal; Mr. C. Parks, certificate of honour. Medical Jurisprudence: Mr. Thomas Bird, medal; Mr. G. B. V. Nash, certificate of honour. Botany: Mr. Jos. Warburton, certificate of honour. Ophthalmic Medicine and Surgery: Mr. G. B. V. Nash, book prize; Mr. Thomas Bird, certificate of honour. Pathological Anatomy: Mr. G. B. V. Nash, medal, Mr. Thomas Bird, certificate of honour.

BOOKS RECEIVED.

Observations in Clinical Surgery. By James Syme. Edinburgh: 1861.

Cooper's Dictionary of Practical Surgery. Edited by S. A. Lane. Vol. I. London: 1861.

The Use of the Ophthalmoscope. By J. W. Hulke, F.R.C.S. London: 1861.

Diseases of the Prostate. By H. Thompson, F.R.C.S. London: 1861.

Address to the Southampton Microscopical Society. By J. Bullar, M.D. Southampton: 1861.

Germs and Vestiges of Disease. By H. Dobell, M.D. London: 1861.

Epilepsy. By J. R. Reynolds, M.D. London: 1861

The Parasitic Affections of the Skin. By T. McCall Anderson, M.D. London: 1861.

Guy's Hospital Reports. Vol. VII. London: 1861.

London to the Vatican. By Dr. T. C. Wood. London: 1861.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 4, 1861.

BIRTHS.

Births of Boys, 923; Girls, 895; Total, 1818.
Average of 10 corresponding weeks, 1851–60, 1505·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	603	544	1147
Average of the ten years 1851–60	538·3	522 7	1061·0
Average corrected to increased population..	..	..	1329
Deaths of people above 90	2	..	..
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West'.. ..	463,373	..	1	11	1	3	5	5
North ..	618,201	1	2	22	5	8	20	11
Central ..	378,058	1	..	13	2	7	7	2
East	571,129	2	4	19	2	11	10	17
South ..	773,160	..	..	34	11	15	11	24
Total.. ..	2,803,921	4	7	99	21	44	53	52

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Chambers's Introductory Clinical Lecture will appear on November 2.

Mr. W. Adams's Third Lecture on Spinal Curvature will appear next week.

Dr. Gray's Case of Epilepsy shall appear next week, if possible.

A. C., Londonderry.—We shall be glad to publish the paper, as no accurate accounts of great and sudden changes of atmospheric pressure are on record, so far as we are aware.

J. B.—Markham on Diseases of the Heart; Walshe on Diseases of the Heart and Lungs.

St. Ives—Warburg's Tincture is a secret preparation, supposed to be a solution of beeberine in alcohol.

M.R.C.S. should write to the Secretary.

M.R.C.S. and L.S.A. should send a full statement of the case to the Commissioners in Lunacy.

Mr. Spaull explains the "illiterate puff" on our 354th page as the act of injudicious friends. It is unnecessary to publish his letter.

Mr. J. Jones.—The note shall be attended to.

Dr. Cregeen.—The paper was received, and will be used as soon as possible.

Dr. Jenner's Lecture on Tuberculosis, and the Evidences of the Deposit or Formation of Tubercle in the Child, will appear on October 26.

Aspirant.—By the Warrant it was provided that Assistant-Surgeons should at first rank as lieutenants, and after six years' service as captains; Surgeons as majors, according to the date of their commissions; and Surgeon-majors as lieutenant-colonels, but junior of that rank. The hardship caused by the recent alteration in the Warrant consists in depriving the Assistant-Surgeons to be hereafter promoted of their relative rank according to the date of their commissions, and making them junior of the rank to which they are promoted.

A Quiet Man writes that "last night all the bells and the knocker of my house were made to sound in the most alarming way, peal after peal, insomuch that all my children and servants and an invalid relative were awoke in the greatest consternation, from the belief that nothing less than a fire could have caused such a hubbub. I rushed down stairs undressed, the ringing going on all the time, and on opening the door was met by a request to come instantly to see a woman in a neighbouring back street, alarmingly ill in labour. I dressed instantly and went, when to my surprise I found a woman in bed in easy labour, and a Practitioner, who had just arrived. Being somewhat indignant at being thus needlessly disturbed, and saying that it was quite enough to have sent for Mr. ——, who was engaged to attend, I was coolly asked 'What *is* Doctors for, then, if they arn't to be sent for?' It is needless to add that I got no fee."

We have long been made aware, through the medium of the local papers, of the scandalous worry which has been inflicted on Dr. Barclay, Medical Officer of Health for Chelsea, by a small section of the Vestry of that parish, but we have thought it the more respectful course to Dr. Barclay, as well as to the right-minded portion of the Vestry, not to give publicity to proceedings which evidently have no other aim save to worry a high-minded and honourable man, who does his duty admirably, in the teeth of incessant vexation and insult. Let us ask, Are there any Medical men in the Chelsea Vestry; and what is the publicly-expressed opinion of the Medical men of the parish on these matters? They cannot help feeling that this petty malice shown to Dr. Barclay is an insult to their whole order and to themselves; and we should like to hear of some public expression of opinion on their parts.

ERRATUM.—Page 363, 1st column, line 26 from bottom, *for* I have demonstrated, *read* I here demonstrated.

COLONIAL SURGEONS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will some one who has had practical experience of the duties of Colonial Surgeon have the kindness to inform me how that appointment is obtained, also the remuneration and probable duties of that office?

October 7. I am, &c. M.R.C.S.

RICE AND CATARACT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Some time ago my chickens suffered from cataract, on enquiry, I found that rice often causes blindness in poultry.

Rice injures poultry by causing purging—possibly its aperient effect is the reason of its causing blindness.

The English poor are so reluctant to make use of rice that I do not think it ever affects their eyes. I am, &c.

October 5, 1861. B. A.

SMALL-POX IN CENTRAL AFRICA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I find the following in "Barth's Travels in North and Central Africa" (Vol. I., p. 425):—"The small-pox, a very fatal disease in Central Africa, against which, however, several of the native Pagan tribes secure themselves by inoculation,—a precaution from which Mohammedans are withheld by religious prejudice."

Is this statement of the prejudice of Mohammedans not inconsistent with the fact that we derived the custom of inoculation from a people of that creed? I suppose inoculation for small-pox is meant by the Doctor, and not vaccination.

Can any of your readers tell me how far such a prejudice exists among the followers of the Arab Prophet, and by what other people it is shared?

I am, &c.

Hanley, October 1. J. S.

DR. HASSALL'S TESTIMONIALS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I send the following in confirmation of your remarks in the last number:—

"Report on 'the 'Patent Magnetic Hair and Flesh Brushes,' of Mr. F. M. Herring. By Dr. Hassall. "I have carefully examined, and also tested, the magnetical properties of the 'Patent Magnetic Hair and Flesh Brushes' of Mr. F. M. Herring, and I have to state, as the result of this examination, that I regard them as the most perfect Brushes hitherto constructed, both

as respects their mechanical construction and their magnetical action. The Flesh Brush I consider to be most effective, for it removes the outer and older portions of the epidermis, and then frees the pores of the skin much more completely than any of the Brushes or Gloves now in use."

"(Signed) Arthur Hill Hassall, M.D. Lond., Analyst of the *Lancet* Sanitary Commission; Author of the Reports of that Commission; of 'Adulterations Detected;' and other works. 74, Wimpole-street, Cavendish-square."

Can it be genuine? I am, &c.
October 1. CHIRURGUS.

A QUERY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will any of your readers oblige by giving a reason for the designation of the Fracture of the Lower End of the Radius as "Colles' Fracture?"

It can hardly be supposed that Mr. Colles was the first person to notice or describe it. A simple reference to authorities, as quoted by Malgaigne, will at once dispose of that point. I am, &c.
October 7. AN HOSPITAL SURGEON.

LOCAL PAPERS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following paragraph, from a local paper of the East End, may serve as a pendent to that you lately published from Kensington:—

"Surgical Skill in Poplar.—In justice to the Medical men of the parish, we think it right to record the following case:—Some two or three months since, William Horgan, a blacksmith, in the employ of Messrs. Green, of Blackwall, whilst at work, received a very serious injury, in consequence of the face of an iron punch flying off and penetrating his left eye. Although he was a patient of the Eye Infirmary, Moorfields, eleven weeks, the Surgeon of that Institution failed to extract the iron; but on his applying to "*Dr." F. M. Corner, of Bow-lane, Poplar*, that gentleman succeeded in extracting the metal; although, we regret to say, the wound was of so serious a nature, that it is doubtful whether poor Horgan will recover his sight." I am, &c.
M.R.C.S.

A QUERY.

"In this parish (Bride. in the Isle of Man,) died not many years ago an ossified man, who was considered by every one who saw him a most extraordinary phenomenon. The ossification of his flesh went on progressively for many years. Before his death he was reduced to a solid mass of bony substance, and had only the use of one or two of his toes, all other parts of his frame being immoveable. He was buried in Kirk Andreas churchyard, and great efforts were made by Medical men to get possession of his body, but his grave was strictly guarded by his friends. After several ineffectual attempts to carry him off, the Surgeons at last succeeded, and his remains are now in the possession of Dr. McCartney, in Dublin."—Kneale's Guide to the Isle of Man, p. 163.

How much truth is there in this story? J. D.

CHLOROFORM IN PIG KILLING.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I was glad to see in the *Medical Times and Gazette*, of September 28, a correspondent drawing the attention of the public to the use of Chloroform in Pig Killing, where the animal was slaughtered without feeling pain.

I have often wondered why chloroform should not be experimented upon in the killing of all domestic animals, in the presence of a Commission of Veterinary Surgeons, who should report upon its practicability; and if it is found to be not detrimental to the quality of the meat, why should not butchers be compelled to use it?

The present mode of slaughtering sheep is a cruel and barbarous one. I am in the habit of going through Newgate Market frequently, on my way to Paternoster-row, and can truly say that I seldom pass through the market without having to witness shocking cruelty, by twisting of tails and by goading, etc., to get the animals in the narrow dens called slaughter-houses, and when they do get the poor victims in, the place is so small as not to allow sufficient space for the men to slaughter them. I have seen, probably, one hundred sheep in a space hardly large enough to turn a horse round in (the sheep having almost to stand upon each others backs), and the men killing them, and hanging up the dead among the living. This can be seen any day if any person will take the trouble to quietly walk through the market.

This is the barbarous way in which sheep are killed in Newgate Market:—The sheep is put in a thing much of the shape of a wheelbarrow; then the knife is pushed through the neck and withdrawn, and the sheep is left to kick and die, the blood slowly oozing out and falling into a tub placed there for that purpose; it takes about ten minutes before the animal ceases kicking. When one is taken from the barrow to be skinned, another one is stuck, so there are always two on the barrow. I say this is a cruel way to kill sheep; that the animal suffers greatly there can be no doubt, for he trembles and kicks, opens its mouth, and the glare of its eyes are tremendous. It is high time the nuisance of Newgate Market was swept from the City, and all its cruelties and abominations with it. There can be no doubt, as your correspondent asserts, that a sharp blow on the head with a hammer, before sticking the sheep, would deaden the pain, and the animal would scarcely feel the knife; but butchers are not the men to adopt it unless compelled. I am, &c; HUMANITAS.

A CAUTION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I beg the aid of your widely-circulated columns, in order to warn the Medical Profession throughout the Kingdom against a German, who is going about begging in town and country, under the name of "Dr. Lesser." This imposter who, as far as can be gathered from his conversation, has certainly studied Medicine, called upon me one day last week, and said that he had been recommended to apply to me for pecuniary aid by Mr. Ernest Hart, Dr. Hess, of Artillery-place, and Mr. Edmond Gurney. After this he began a most extraordinary story, which came out piecemeal, and of which I merely give the leading points for brevity's sake:—

"Dr. Lesser" is of Jewish parentage, but has embraced Christianity, in consequence of which he was disinherited by his father, a man of considerable wealth "Dr. Lesser" has studied Medicine, and na[illegible] philosophy at the University of Berlin. He took part in the German Revolution of 1848, and came to England as a refugee. He had an interview with Lord Palmerston at the Foreign Office about the colonization of a part of Canada by German refugees. He was then called by Professor Lyon Playfair to Edinburgh, and there received an appointment at the Chemical Laboratory. He was very much lionised in Edinburgh society, and was, at a ball, introduced to a lady of high rank, who at once fell violently in love with him. "Dr. Lesser," upon proposing for the lady, was, however, peremptorily refused by the father, and left Edinburgh for London, where he saw in a newspaper a paragraph from Edinburgh that the lady was dangerously and unaccountably ill, and was not expected to live. Upon this he at once returned to Edinburgh and was admitted to see her, who then quickly recovered. A marriage afterwards took place, but as it was thought to be a més-alliance by both families, no pecuniary aid could be obtained from either side.

"Dr. Lesser" took part in the Crimean war, where he was disabled, and in consequence of an injury to the spine became subject to epileptic fits, after which he was idiotic for a long time and received in a lunatic asylum. On the death of his grandfather he came in possession of a legacy of £3000, of which he was, however, robbed by a swindler in Canada; and his wife and children would certainly have been starved if it had not been for the benevolence of Mr. Edmond Gurney. A short time ago his wife and three children died, and he was now in very distressed circumstances. He only required to be kept from starvation for a few days, when he would receive £60 for literary labour, which he had undertaken for Messrs. Williams and Norgate, of Henrietta-street, and Mr. Tauchnitz, of Leipzig.

"Dr. Lesser" showed me a letter purporting to come from Mr. Ernest Hart, and another from Mr. Tauchnitz. He also excited my commiseration by saying in a faint voice that he feared another epileptic fit. Truth being often "stranger than fiction," I confess that I was thrown off my guard; but suspicion having afterwards become aroused, I made a few inquiries, which gave the following results:—

1. The address given by "Dr. Lesser"—New House Cottage, Abbeywood, Kent,—proved to be false. No such person was known there.

2. Professor Lyon Playfair writes: "……No German of the name of Lesser was ever employed by me at Edinburgh….I know nothing of any person called Lesser, either as an assistant or as a pupil."

3. Messrs. Williams and Norgate write: "….We never saw or heard of a Dr. Lesser, and are quite sure that he has not the slightest connexion with Mr. Tauchnitz."

Personal appearance of "Dr. Lesser":—Tall (about five feet ten inches), pale, cadaverous-looking, black hair, wears spectacles, is dressed in a black velvet coat. He speaks English with a foreign accent, and German as an educated person.

I will not forget to mention that "Dr. Lesser" expressed strong indignation at a dreadful case of mala praxis which he said had just occurred at the hands of a well-known Hospital Physician, and about which a "Court of inquiry" was now sitting. This story also turned out to be untrue from beginning to end. I am, &c.
18, Bryanston-street, October 1. J. ALTHAUS, M.D.

COMMUNICATIONS have been received from:—
Dr. JENNER; Dr. CHAMBERS; Mr. W. ADAMS; Dr. GREENHALGH; Dr. WEBER; Dr. DAY; Dr. GRAILY HEWITT; Dr. METCALFE; Mr. SOLOMON; Mr. H. THOMPSON: Mr. GORE; Dr. WOOD; Dr. BULLAR; Mr. SPAULL; Mr. TEULON; Dr. DEVENISH; Dr. FOTHERBY; Mr. JONES; Dr. CREGEEN; and our CORRESPONDENTS at Berlin, Dantzic, Wiesbaden, Florence, Wurzburg, and St. Petersburg.

APPOINTMENTS FOR THE WEEK.

October 12. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

14. *Monday*.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. W. Coulson, Esq., the President, "Case of Secondary Abscess with Disorganization of the Knee-joint following Scarlatina and Parturition."

15. *Tuesday*.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting. Exhibition of Specimens.

16. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 8 p.m. Meeting.

17. *Thursday*.

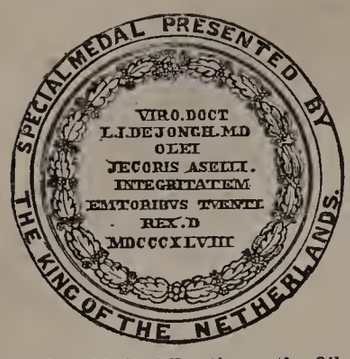
Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m, London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

18. *Friday*.

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 p.m.:—
By Mr. Holt—Excision of the Head of the Femur.
By Mr. Holthouse—Plastic Operation for Burn of Hand.
By Mr. Hillman—For Stricture of the Urethra; for Hydrocele.



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SELECT MEDICAL OPINIONS.

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Dr. BARLOW, Physician to Guy's Hospital:—"I have been well satisfied with the effects of Dr de Jongh's Cod-liver Oil, and believe it to he a very pure Oil, well fitted for those cases in which the use of that substance is indicated."

Dr. LANKESTER, F.R.S., late Lecturer on the Practice of Medicine, St. George's School of Medicine:—"I consider that the purity and genuineness of this Oil are secured in its preparation by the personal attention of so good a Chemist and intelligent a Physician as Dr. de Jongh, who has also written the best Medical Treatise on the Oil with which I am acquainted. Hence I deem the Cod-liver Oil sold under his guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

Dr. COWAN, Senior Physician to the Royal Berkshire Hospital:—"The material now sold varies in almost every establishment where it is purchased, and a tendency to prefer a colourless and tasteless Oil, if not counteracted, will ultimately jeopardise the reputation of an unquestionably valuable addition to the Materia Medica. Dr. Cowan wishes Dr. de Jongh every success in his meritorious undertaking."

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This quotation admits of neither credit nor discount, and 1s. per allon must be added for packages, to be allowed on their return.

HENRY BRETT and Co., Old Furnival's Distillery, Holborn.

Crystal Cloth Presser, new style Hemmer, Binder Corder, &c.

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The LOCK STITCH SEWING-MACHINE will Gather, Hem, Fell, Bind, or Stitch with great rapidity, and is the best for all descriptions of work, is simple, compact, and elegant in design; the work will not ravel, and is the same on both sides; the speed is from 1000 to 2000 stitches per minute; a child twelve years old can work it, and the Machine is suitable alike for the Family or the Manufacturer. Illustrated Prospectus, with Testimonials, gratis and post free.

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Umbrellas need no longer be exposed to theft, nor be hidden away wet, or kept in the hand to soil or ruin a carpet.

This invention combines with a tasteful Umbrella Stand, perfect security against the loss of an Umbrella. It is suited to Private Dwellings, Lodging-houses, Offices, Counting-rooms, Shops, Hotels, Churches, Theatres, Concert and Lecture Rooms, Public Buildings, &c. And is recommended as an article of universal utility.

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SMALL MINCER FOR THE DINNER-TABLE, &c.

This little machine is for the use of those who cannot properly masticate, and who, in order to preserve health, should have their food thoroughly minced. As an aid to digestion it is invaluable, being adapted for hot or cold meat, &c., and very efficient and rapid in its operation. Price 30s.

TESTIMONIAL.

"12, Norfolk Villas, Bayswater.—I have had one of your Mincing Machines for the Dinner Table in use for some time, and find everything that can be wished. I recommend it to all my friends who suffer from indigestion. Yours obediently,

"Messrs. Nye and Co." "T. Saunders.

LARGER MACHINES for Public Institutions, Lunatic Asylums, Hospitals, Schools, and other establishments, effectually and quickly mincing all kinds of meat and vegetables, for soups, &c., forced and potted meats, and a variety of dishes; also for making sausages, cutting, mixing, and forcing into the skins at the same time. Price 30s., 42s., 63s., and £7 7s.

Also MILLS on an improved construction for Coffee, Spice, &c., &c.

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A CUP OF COFFEE IN ONE MINUTE.

Dunn's Essence of Coffee, warranted

to keep good in any Climate.

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"Coffee is met with in commerce as a manufactured article in the state of Essence, or rather Extract of Coffee. That preparation, providing it be genuine, is peculiarly adapted to the use of Travellers, who are thus enabled to procure a cup of good Coffee without trouble or apparatus. Of all the attempts which have been made to manufacture such an Extract, and of most of which I have had samples, I have found on examination that only one kind, that manufactured by Dunn, of Pentonville, would keep.

"I think I can confidently assert that Dunn's Essence of Coffee is the only one which has stood ground; all other attempts, for some reason or other, have hitherto proved failures, and eventually have been abandoned."

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LITHIA with POTASH, and LITHIA with AMMONIA. These Waters are prepared by Mr. HOGG according to instructions originally given him by Dr. Garrod, and ordinarily contain 2 grs. and 5 grs. of Pure Carbonate of Lithia by itself, or in combination with 20 grs. of Bicarbonate of Potash, or 10 grs. of Phosphate of Ammonia; but to meet particular cases, a suggestion for an increase or diminution would receive prompt attention.

Also, POTASH WATER, containing 20 grs.; CITRATE of POTASH, 30 grs.; CITRATE of POTASH and IRON, 30 grs. and 5 grs.; SODA, 15 grs; SELTZER and VICHY, from their respective analyses.

HOGG, Pharmaceutical Chemist to the Queen, 9, Albion-place, Hyde-park-square.

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MARIENBAD, and other MINERAL WATERS.—ROYAL GERMAN SPA, BRIGHTON.—Under her Majesty's especial Patronage. STRUVE'S PUMP-ROOM is now open for the Thirty-seventh Season. The Bottled Waters are sold at the Pump-room, Brighton, and by GEORGE WAUGH and Co. Pharmaceutical Chemists to the Queen, 177, Regent-street, London, W., and by other respectable houses in London and the provincial towns, where a prospectus with the highest Medical Testimonials may be obtained gratis. CAUTION.—Owing to the use of Struve's bottles by other parties, please to observe that Struve's name is on the label, and red-ink stamp affixed to every bottle of Struve's manufacture.

Aerated Lithia Water. — Messrs.

BLAKE, SANDFORD, and BLAKE are prepared to supply the LITHIA WATERS (of which they were the original manufacturers under Dr. Garrod's instruction) of any strength prescribed by the Profession for special cases. Those in constant use contain 2 grains and 5 grains in each bottle, either by itself, or combined with BICARBONATE of POTASH or PHOSPHATE of AMMONIA.

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BLAKE, SANDFORD & BLAKE, Pharmaceutical Chemists, 47, Piccadilly.

ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT
The Grosvenor Place School of Medicine,
DURING THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.,

Surgeon to the Royal Orthopædic and the Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital.

Lecture III.

ANTERIOR AND POSTERIOR CURVATURES OF THE SPINE.

Liability of the Spinal Column to Disease and Distortion—The latter only the subject of these Lectures—Anterior Curvature of the Spine—Lordosis in the Lumbar, Dorsal, and Cervical Regions; Pathology and Treatment—Posterior Curvature of the Spine—Cyphosis in the Dorsal Region; Cases classified according to the Different Periods of Life at which they occur; Pathology and Treatment.

Gentlemen,—A review of the anatomical and physiological peculiarities of the spinal column, as explained in the previous Lectures, would lead us to expect that this complicated structure, adapted to so many different functions, would become liable both to disease and distortion. *Diseases* affecting its various structures—bones, cartilages, and ligaments—and analogous to diseases affecting similar structures in other parts of the body. Of these diseases, ulceration of cartilages, necrosis and caries of bone resulting in posterior or *angular curvature* known also as Pott's disease, and rheumatic inflammation of the ligaments, are the most common, but of these affections it is not my intention to speak. *Distortions* or *curvatures* of the spine depending either upon the failure of some of the internal conditions necessary to its preservation in a healthy form,—I allude to its proper and healthy nutrition—or upon some external physical influences to which it must be pre-eminently exposed. Hence we have the constitutional and local origin of distortions.

These two classes of cases, viz., diseases and distortions, or deformities of the spine, were by the older Surgical authorities frequently considered as one and the same form of disease, but the wide separation between them, and their easy diagnosis—except, perhaps, in one form, viz., rotation of the lumbar vertebræ accompanied with severe pain, to which I shall hereafter especially allude—are too well known to render any observations necessary from me. I would, however, remark that in modern times, the distinction between these two classes of cases, viz., diseases and distortions of the spine, has been drawn rather too broadly, inasmuch as it has long been customary for Surgical authorities to describe the distortions or deformities of the spine as merely functional affections, arising from muscular debility, etc., and unaccompanied with structural changes except in severe cases of long standing—or what may be called the later stages of these affections—whereas I shall endeavour to prove to you that it is anatomically impossible for any distortion of the spine, such as lateral curvature, however slight, to exist without being accompanied with structural alterations proportionate to the extent and duration of the curvature; and when these structural alterations are considered in connexion with the constitutional conditions upon which they essentially depend in a large proportion of cases, though their immediate causes may be of a mechanical origin, such as the irregular distribution of weight, etc., it cannot be doubted that such affections may be ranked among the simpler forms of disease, with more reason than they can be placed in the same category with the simple contractions and deformities which take place at the moveable articulations of the extremities from debility, position, and other causes indirectly affecting the articulations; and in which we know the joint surfaces preserve their integrity in form and structure, though they may deviate in their relative position to each other. I make these observations because, whilst I fully concur in the propriety of preserving for practical purposes, the broad lines of distinction between these different affections, it is important pathologically that we should determine where such broad lines shade off into each other.

The spinal column, then, is liable to *distortion*, *i. e.* fixed deviation from the erect position, in various directions so as to produce external deformity. The distortion may take place in the *antero-posterior* direction, either as an exaggeration of the natural curves of the spine which become so much increased as to produce external deformity; or the natural curvatures of the spine in the antero-posterior direction may be reversed, especially in the dorsal and cervical regions, *i. e.* the dorsal curve may become depressed so as to project anteriorly, curving forwards instead of backwards; the cervical curve may project backwards instead of forwards; and the lumbar curve frequently becomes straight instead of curving anteriorly. Or distortion may occur as a lateral deviation, though I shall presently explain to you that the deformity described as *lateral curvature of the spine* does not depend upon a true lateral deviation, but rather upon a peculiar twisted, or contorted, condition of the spinal column, in which an external lateral deviation of the spinous processes generally, but not invariably, forms a conspicuous feature. In this affection, however, the bodies of the vertebræ always deviate laterally, even when the apices of the spinous processes—upon the external examination of which Surgeons generally, but erroneously, depend as a test whether the spine is straight or not—remain unaltered in their relative position in the median line of the body. So far, then, as it relates to the altered position of the bodies of the vertebræ, the term lateral curvature is sufficiently correct for practical purposes, and the lateral direction of the deformity is rendered still more apparent by its effect in producing a prominence of one shoulder, or of one hip as it may occur in the dorsal or the lumbar regions, or of both shoulder and hip when it exists as a double curvature. I would therefore propose to continue the use of the term *lateral curvature of the spine*, because it carries with it the idea of a lateral *distortion*, as distinguished from the sharp posterior, or *angular curvature* produced by destructive disease of the spine.

Before describing the ordinary form of *lateral curvature* of the spine, I would observe that deviations of the spine either in the antero-posterior, or the lateral directions, may co-exist with destructive disease of the spine, affecting the intervertebral cartilages and the bones, more especially in the early stage; or they may be consecutive to such diseases, and remain as permanent distortions after the destructive disease has been completely arrested. For example, when destructive disease occurs in the dorsal region, as we frequently see it in children, and sometimes in adults, the posterior convexity of the spine is very much increased, and there may be great difficulty in deciding upon the existence or non-existence of disease. At a later stage, however, a sharp, angular projection of one or more spinous processes takes place, and all doubt as to the existence of disease is removed; but occasionally it happens that several intervertebral cartilages are affected without caries of the bones, as exhibited in preparations in St. Thomas's Museum, No. E 20 and E 22, and in such cases no angular projection of the spinous processes would take place.

When destructive disease in the lower dorsal and upper lumbar vertebræ has become arrested with the ordinary result of angular projection backwards of three or four spinous processes, the spine becomes altered in form, as a consecutive condition, in the middle dorsal region which is either depressed so as to form a straight line, or the natural direction of its curve may be reversed, and a concavity instead of a convexity may exist in the middle dorsal region.

Then, again, when destructive disease attacks the middle and lower lumbar vertebræ, it occasionally happens that the natural concavity in this region is considerably increased in the early stage of the affection. I saw a very remarkable instance of this kind in a young woman, who was admitted into the Orthopædic Hospital under my late friend and colleague Mr. Lonsdale. The increase of the lumbar curve and hollowness of the loins was almost as considerable as we see it in the cases of anchylosis of the hip-joint at right angles after disease, or in cases of congenital dislocation of both hips; the spinal muscles on either side

were very prominent and tense, and a deep depression in the median line existed between them. The nature of the case was obscure; destructive disease was not suspected, the usual symptoms being absent; and it was regarded as essentially a spasmodic or spastic muscular affection, and the propriety of dividing the muscles discussed. Mr. Lonsdale, however, applied a spinal instrument with crutches and a webbing band in front. In the course of a few months the increased lumbar curvature disappeared, and afterwards a posterior, or rather angular, projection of the spinous processes of the twelfth dorsal and the first and second lumbar vertebræ appeared. The disease ran a remarkably favourable course, the more severe symptoms usually met with when disease exists in this region never appearing, and the girl has remained in service; she still continues to wear a spinal support, and comes occasionally to the Hospital Casts from this case are preserved in the museum of the Hospital.

Deviations of the spine in a lateral direction may also occur in the early stage of destructive disease, when it attacks the bodies of the vertebræ, or the intervertebral cartilages, laterally instead of their anterior aspects as usual; or in the later stages, it may exist as a consecutive curve, either above or below the angular projection, resulting from destructive disease in the lower cervical, or the lower dorsal and lumbar vertebræ.

Curvature of the spine, then, either in the anterior, posterior, or lateral direction, may co-exist with destructive disease of the spine in its early stage without any reliable symptoms or indications of such disease being present. It is as well you should bear this in mind, because, in the course of practice, cases will occasionally present themselves in which the diagnosis must be one of considerable difficulty, as well as of great importance, and we know that disease of the spine in the early stage is at all times difficult of diagnosis; but, in the present lectures, it is not my intention to do more than advert to this class of distortions.

Curvatures or distortions of the spinal column, not connected with or dependent upon destructive disease of the bones or intervertebral cartilages, generally depend either upon muscular debility associated with some unfavourable constitutional condition, or upon the long continuance of some faulty position, the result either of acquired habit, or of some occupation; or they may depend upon both these causes combined. This is essentially the class of cases which I now propose to bring under your notice, and will first offer a few observations on the antero-posterior forms of curvature, before describing the lateral deviation.

ANTERIOR CURVATURE OF THE SPINE.

Lordosis—λόρδωσις from λορδόω, to bend supinely, so as to throw the head back. Curvature of the spine in an anterior direction, with the convexity in front, occurs chiefly in the lumbar region, as an increase of the natural curvature, from several causes; but it may also exist in the dorsal region to a less extent, and more rarely it occurs in the cervical region.

In the lumbar region this increase of anterior curvature is found—

1st. As a peculiarity in the natural conformation of the individual—often existing in several members of the same family, and hereditary. It is more common in some countries than in others, but in England I have most frequently observed it in short people, with long bodies and short legs, *i. e.* belonging to the rachitic type of development, and whose bony development exhibits some indications of a rachitic tendency.

2nd. As a constant effect of rickets in its more severe forms, in which the entire skeleton indicates the existence of this affection in the stunted growth of the individual from arrested development of the bones—more conspicuous in the leg-bones from their normal rapid rate of growth during early childhood as compared with the spine and other bones of the body, hence the disproportionate shortness of the legs in these cases—and in various curvatures especially affecting the leg-bones and the pelvis. In severe rickets, I need hardly explain to you that the pelvis becomes flattened from above downwards, from the inability of its bones to support the superincumbent weight, and the sacrum assumes a horizontal direction. As a necessary result of this alteration in the direction of the sacrum, and the deviation in the axis of the pelvic cavity, an increase of the lumbar curve of the spine takes place to preserve the equilibrium of the body, and in these cases of rickets a very marked *lordosis* is the result.

3rd. As a constant effect of congenital dislocation, either of one or both hip-joints, an affection which occurs more frequently than is generally supposed. About twelve cases, or probably more, have come under my notice since this affection was first pointed out to me by Dr. Carnochan, of New York, in the year 1845, when that gentleman, being in England, brought a case of congenital dislocation of both hips, in a boy, aged 18, to St. Thomas's Hospital, for the purpose of demonstrating this affection, to which he had paid much attention. The external characters of the dislocation, and its effects in altering the conformation of the chest and abdomen, in consequence of the tilting forwards of the pelvis, and the production of lordosis to an extreme degree in the lumbar region, were so strikingly illustrated in this case, that, under the direction of Mr. South, an entire model of the boy was made by Mr. Kierney, and is now in the museum of the Hospital.

This form of dislocation, in which the heads of the thigh bones are generally displaced upwards on the dorsum ilii, or upwards and backwards, appears to be very seldom diagnosed. Commonly no attention is directed to the condition of the hip-joints till some time after the period of walking, and then, when only one joint is affected, the limping of the child induces the Surgeon to suspect the existence of hip-joint disease, and the case is treated accordingly. This error in diagnosis has occurred in several instances which have fallen under my observation in private practice.

When dislocation of both hips exists, the real nature of the affection is also generally overlooked, and I have known it said that the child would grow out of the peculiar waddling gait which characterises the walk in these cases. It is, then, in congenital dislocation of both hips that extreme incurvation of the lumbar region takes place, as a compensative effort to preserve the equilibrium of the body, disturbed by the tilting of the pelvis which necessarily results from the abnormal position of the heads of the thigh bones.

4th. Either coexisting with destructive disease of the lumbar vertebræ in the early stage, as in the case already described, or as a consecutive curve after destructive disease has become arrested, and angular curvature, *i.e.*, posterior projection of one or more spinous processes, produced in the middle or lower dorsal regions. In such cases the lordosis in the lumbar region is necessary to preserve the equilibrium of the body, and is, of course, persistent through life.

5th. As a constant effect of anchylosis of the hip-joint, with the thigh in a flexed position. After strumous disease of the hip-joint, rheumatic inflammation, and several other affections, anchylosis of the hip-joint, either ligamentous or bony, frequently takes place, with the femur in a flexed position, in most cases at an angle of about forty-five degrees, but sometimes at a right angle with the pelvis. The angle is generally much greater than is apparent at first sight, because in standing or walking, the patient brings the foot to the ground, by increasing the natural curvature of the spine in the loins, and in these positions, therefore, lordosis is produced, but it is more or less completely removable when the patient sits down. In such cases we have a greatly increased amount of flexibility in the lumbar region.

TREATMENT.

Surgically speaking, *lordosis* occurring in the lumbar region is of very little importance, as in its worst forms it is only a part of a more important affection, and very seldom becomes the subject of treatment; but it may sometimes assist us in the difficult diagnosis of destructive disease occurring in the lumbar vertebræ, as it might have done in the case above described, had we known of the occasional co-existence of these affections, and sometimes, though very rarely, it may become the subject of special treatment. In connexion, however, with the treatment of the diseases, such as rickets and caries which sometimes produce this form of curvature, I would especially direct your attention to a few practical points.

In the first class above described, viz., that dependent upon natural configuration or peculiarity, either of family or race, of course there could be no attempt at Surgical interference.

In the second class—the rachitic form—no special treatment is indicated, but with the view of preventing this,

as well as the more important pelvic distortion which accompanies it, I recommend as a general principle in cases of rickets, that the children be allowed to stand or sit as short a time as possible, *i.e.*, that standing or walking for any length of time must not be allowed, and that reclining or complete lying down be encouraged. It is a very serious, though common, practical error to send children in whom rickety curvatures have commenced, into the country, or to the sea-side, and encourage them to run about all day long; such children generally return with improved health, but the curvatures more confirmed. This is very good treatment for slight cases of knock-knees and bow-legs, which children certainly do grow out of when the general health and strength are improved, but a great mistake in cases of true rickety curvatures, which we know are immediately produced by mechanical causes acting upon imperfectly nourished bones. I need not allude to the influence of muscular action, either in causing or increasing rachitic curvatures. The bones of the legs and the pelvis become distorted simply by the weight of the body, which they are unable to sustain, and, therefore, I remove the weight of the body as much as possible; substitute exercise in the horizontal for exercise in the erect position, and rely upon constitutional treatment, especially cod-liver oil with steel, and the hypophosphite of lime, etc., for promoting the cure of the disease, if so it may be called.

Children may be induced to take a great deal of exercise, as amusement, by pulling themselves up and down an inclined plane with ropes, pulleys, and weights properly attached. They should be kept in the open air, in the country, or at the sea-side, as much as possible, and the reclining position in a properly arranged carriage be encouraged. In many cases it may be impossible to carry this plan out as fully as could be desired, but if the principle be admitted, it may in all cases be adopted to a greater or less extent. We know that rickets, as a general rule, undergoes spontaneous cure with the increasing age of the child, and the alteration of its diet; and that the bones become even stronger than healthy bones, but that the deformities remain persistent through life. It may be said that rickety children grow out of the disease, but they grow into the deformity. The danger in females of the pelvic distortion, of which the spinal curvature or lordosis is the least important consequence, I need hardly advert to, but I believe that all the rachitic distortions may be, to a great extent, prevented by the treatment I have mentioned.

In the third class, i.e., lordosis in cases of congenital dislocation of the hip-joint, it is very doubtful whether any permanent diminution of the spinal curvature can be effected by mechanical means, though I have seen it attempted, and with some appearance of temporary benefit. Possibly the lordosis may be diminished by the constant use of a spinal instrument from early childhood to the completion of growth, but as the hip-joint articulations must remain in their abnormal condition, it is very doubtful whether any permanent advantage would be obtained by such means.

In the fourth class, i.e., lordosis existing during the progress of destructive disease in the lumbar region, or as a consecutive curve after destructive disease has subsided and angular curvature been produced in the middle or lower dorsal regions—there can be no doubt of the very great advantage of mechanical support during the progress of caries or destructive disease in any region of the spine, and the case of lordosis co-existing with caries in its early stage in the lumbar region, previously mentioned, affords a good illustration of the advantage of this plan of treatment. In all Surgical works, without any exception so far as I have noticed, the necessity of the patient lying down during the progress of caries or destructive disease of the spine, is strongly insisted upon; but since my connexion with the Orthopædic Hospital, now nearly eleven years, I have invariably opposed this rule, and adopted the practice of applying mechanical support to the spine in these cases, by means either of a leather or steel apparatus, according to the age, and allowing the patient to walk about when so disposed. This treatment I find to be equally applicable to all stages of caries or destructive disease of the spine, from its commencement which we may in most cases diagnose before any angular projection has taken place, and even when the destructive process is evidently advancing, provided the patient be able to bear the support, and is disposed to walk. The mechanical support enables such patients to walk about with comfort, and does not in any way interfere with, but I believe essentially promotes, the proper constitutional treatment of the disease. During periods of increased pain such as may occur in the stage of abscess, confinement to the bed is dictated by the patient's feelings, but as soon as the child (most of these cases are seen in children) is disposed to walk again, I allow him to do so. I never employ any local counter-irritation. All abscesses should be opened early by a valvular or subcutaneous opening, which I think is much better than allowing them to attain a large size, and the patient to suffer from the tedious process of pointing and bursting. In old cases of lordosis in the lumbar region, or consecutive to caries and angular curvature in the dorsal region, no advantage is to be derived from treatment, the curvature being a natural compensating effort to maintain the equilibrium of the body.

In the fifth class, i.e., lordosis consecutive to hip-joint disease, the curvature is also a natural compensating effort to maintain the equilibrium of the body, and there are no indications for Surgical interference.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON THE IMMEDIATE TREATMENT OF STRICTURE OF THE URETHRA.

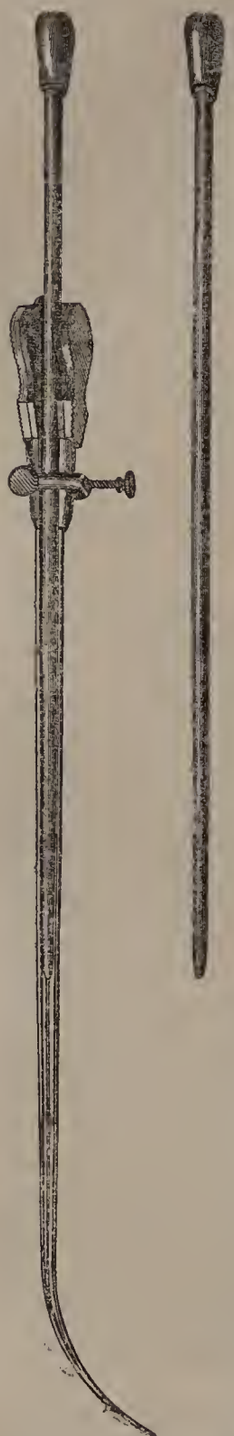
By BARNARD HOLT, F.R.C.S.,
Senior Surgeon and Lecturer on Surgery at the Westminster Hospital.

The benefits which the illustrious brothers William and John Hunter have conferred upon mankind can hardly be exaggerated. By introducing into pathology the finely inductive reasoning which had previously characterised their physiological speculations, they elicited a system of enlightened principles which have thoroughly humanised every branch of the healing art. Nature, these great teachers clearly showed, was the only safe instructress in pathology and in therapeutics, and a careful and patient study of her processes in health and in disease formed the only reliable basis for successful practice. Out of the school of these eminent Medical philosophers issued many distinguished disciples, who by their writings, lectures, and example have spread a knowledge of the Hunterian system throughout these kingdoms, and even awakened a surmise of the nature of these important truths in France and Germany. The pre-eminent abilities of Baillie, Abernethy, and Denman gradually moulded the practice of Medicine, of Surgery, and of Midwifery in subjection to the Hunterian principles. A careful interpretation of Nature was the rigidly enforced rule. All rash, meddlesome, and coarse methods of treatment were denounced, the *vis medicatrix* was perpetually appealed to, *arte non ni* was constantly ejaculated. The late excellent Surgeon, Mr. Lynn, an eminent pupil of Hunter, used, in his eccentric way, often to say, "*Nater*, gentlemen, *Nater* cures the disease."

Without doubt this habitual subjection of the mind to the careful contemplation of natural processes was at the bottom of the marked improvement which of late years has taken place in every department of our art. It is a weakness of the human mind, however, to oscillate from one extreme to the other. In Medicine, from the extreme of heroic doses and a licentious use of the lancet, the practical pendulum vibrated to Homœopathic globules and a supinely expectant treatment. In Midwifery, from excessive instrumentation, the accoucheur has occasionally fallen into a helpless acquiescence in avoidable evils; and in Surgery even an affected aversion to the knife has too often seduced the operator into a fatal procrastination.

The "native hue of resolution," which is nowhere more necessary than in the practice of Surgery, has not, perhaps, in any class of affections been so injuriously "sicklied o'er" as in certain obstinate forms of stricture of the urethra. Mr. Abernethy's denunciations of all violence in catheterism as being inconsistent with the main purpose of the remedy, viz. the absorption of the material of the stricture, has had a greater effect than he probably contemplated. A timid and dilatory treatment has been the result, and in too many instances the supineness of the Surgeon has permitted the

case to drift to a fatal termination. It is a sad truth that *Nater* will not cure a chronic stricture.



My attention was early attracted to the prevailing defects in the treatment of strictures. I could not but observe the tediousness of the treatment by ordinary dilatation, occupying many months before an average instrument could be introduced into the bladder, and that even when the dilatation was accomplished, the constriction generally returned, so that perpetual surgical care was required.

Being deeply impressed with the unsatisfactory nature of the prevailing methods of curing these distressing maladies, about seven years ago I adopted a more energetic mode of treatment, and invited the notice of the Profession to a new "Stricture Dilator." Its use was at first limited to simple dilatation, which was readily effected by graduated tubes passed between the blades without the withdrawal of the original instrument. Experience, however, soon showed me that, as a general rule, when dilatation was carried much beyond the degree produced by ordinary bougies, "stricture fever" was induced. I therefore determined, though with some apprehension as to the consequences, *to split the stricture* by passing the largest sized tube at once, and thus immediately to enlarge the contracted part of the canal, so that it might receive a catheter equal to the entire breadth of the urethra.

Fearing the effects of the urine being permitted to come in contact with the laceration thus occasioned, I kept a gum elastic catheter in the bladder, but as this measure gave rise to considerable irritation, I determined to content myself with simply splitting the stricture, drawing off the urine, and not again using the catheter till two days after the operation. After that interval an instrument of the same diameter as that used at the time of the operation was again employed, and its use was continued, first on alternate days, and subsequently at longer periods of delay.

The course of experience has shown, indeed, that instances occur in which it is necessary to use a catheter one size less than that first passed after the operation, but such cases are exceptions. The instrument by which this simple process is accomplished consists, as is shown in the drawing, of two grooved blades fixed in a divided handle, and containing between them a wire welded to their points, and on this wire a tube (which, when introduced between the blades, corresponds to the natural capacity of the urethra) is quickly passed, and thus ruptures or splits the obstruction. The simplicity of this apparatus is obvious to all, and the history of above a hundred cases proves that its use is unattended with any of those serious complications,—viz., hæmorrhages, false passages, infiltration of urine, perinæal abscess, fistulæ, swelled testis, etc., etc.—which too often accompany the other operative process devised for the relief of these organs. The forcible distension caused by the dilator affects the morbid obstruction only; the healthy portion of the canal is not disturbed, the slightly vascular character of the strictural deposition and resisting tissue gives rise to but very inconsiderable bleeding, and the subjacent adventitious texture perfectly obviates infiltration into the surrounding cells. A perusal of the following cases, which are extracted as salient examples from a long series which were witnessed through their whole career by the students and Surgeons who favour the practice of the Westminster Hospital by their attendance, will, I think, corroborate the points which I wish to establish, and, I hope, justify me in upholding as proved the following conclusions:—

1. The operation is of the most simple kind, and anyone who can pass a bougie through a difficult stricture is competent to perform it.
2. It is not attended with hæmorrhage, infiltration of urine, abscess, or any serious local mischief.
3. In the majority of instances the relief is immediate.
4. The occurrence of rigors or any other constitutional disturbance is very rare, and the patient is seldom confined to bed longer than from twelve to twenty-four hours.
5. The urethra is immediately made permeable by a catheter of full size, which may be ever afterwards passed at discretion.
6. This method is available in every kind of stricture where a canula of any size can reach the bladder.
7. When the after treatment is judicious and attentive, the full capacity of the passage is always maintained.
8. In all cases of neglected treatment the stricture yields to this method more promptly than to any other.
9. It being impossible that any but the diseased tissue can be divided, the splitting of the stricture, has a decided superiority over any cutting operation.
10. And to sum up the great advantages in one proposition, the process is facile, speedy, prompt in effects and free from every danger, immediate or remote. The course of general treatment will naturally vary, according to the kind of obstruction, the number of strictures, and the occasional complications of contracted bladder, enlarged prostate, fistulæ in perinæo, false passage, etc. In simple stricture, however narrow, the relief will be immediate, but in the more complex forms of these maladies, the size of the stream is not so directly increased, as might have been anticipated, from the immediate enlargement of the canal. Notwithstanding, however, the stream may for a short time remain somewhat restricted, the patient is able to empty his bladder much more quickly and effectually, and has less frequent micturition. The limitation of the jet evidently depends upon the thickening of the surrounding textures, and swelling of the mucous lining, these morbid states speedily subside, and in a short space of time the patient can void his water in a normal manner.

Case 1.—*Stricture of Twenty-five Years' Duration—Severe Constitutional Disturbance—Recurrence of "Stricture Fever" after each attempt to introduce a Catheter—Retention of Urine—Hæmorrhage—False Passage—Operation—Recovery.*

Thomas W., aged 50, a labourer, of dissolute habits, was admitted under my care, on November 5, 1857. He had been the subject of stricture for twenty-five years, during which period the stream has been gradually contracting, and the urine is now passed guttatim. Five years since he was an in-patient at St. Thomas's Hospital where, after considerable difficulty, a No. 1 catheter was introduced and retained, being replaced by others in succession, until No. 6 could be passed, when he left. The contraction speedily recurred, and he was admitted into the Westminster Hospital as above. He is now greatly emaciated, with brown and dry tongue; pulse 110; countenance pallid; appetite defective; abdomen tympanitic; nights restless; and there is a constant escape of fæces during the straining to evacuate the bladder, an effort which he is compelled to repeat every hour and a-half. The House-Surgeon having twice failed in passing a No. 1 catheter, each attempt being followed by syncope and subsequent rigors, I saw the patient, and directed the nightly use of the warm bath, and prescribed salines with opium through the day, and castor-oil every morning. At the expiration of a week his general condition was sufficiently improved to justify the attempt to introduce a No. 1 catheter, when a stricture was detected five inches from the meatus, through which it was impossible to penetrate. Although the examination was conducted with the greatest gentleness, it was followed by a severe attack of "stricture fever," which was only relieved by the administration of opium. The urethra being irritable, and the patient much exhausted, another week was permitted to elapse, during which time quinine and stimuli were administered, but the second trial was likewise futile, and followed by precisely the same results as the first. After the lapse of a third week, and while the patient was fully under the influence of opium, a third attempt was made, but with no better success. I

therefore determined to place the patient thoroughly under the influence of chloroform, when, after very considerable difficulty, a No. 1 catheter was introduced, and a pint of highly-offensive and turbid urine withdrawn. In the evening he had retention which, after great difficulty, was relieved by a No. 1 gum catheter; there was considerable hæmorrhage, the patient losing from ten to twelve ounces of blood. He passed a restless night, and being unable to make water, the catheter was again had recourse to. (The House-Surgeon having unfortunately omitted to retain the former.) As it was found to be impracticable to re-introduce it, the man was again anesthæsiated, and another attempt made, but although the catheter passed its whole length no urine followed, and it was evident a false passage had been made. Opium and the warm bath were had recourse to, and in a few hours a small quantity of bloody urine escaped and continued to dribble away during the day and night.

When I saw the patient on the following morning his tongue was dry and brown; pulse feeble and rapid; skin hot, dry, and blanched; and he complained of great tenderness upon pressure over the lower part of the abdomen; he was immediately ordered calomel and opium every four hours, and a turpentine fomentation over the seat of pain. For the next few days he continued in a very precarious state, but the symptoms gradually yielded, and in ten days from the retention the urine was free from blood; his health was, however, so much shattered by the accompaniments of the retention, that a month elapsed before any further instrumental attempt was made. Former experience having shown the impossibility of introducing any instrument excepting while under chloroform, he was once more anesthæsiated, and the dilator with difficulty passed into the bladder; the large sized tube was then quickly passed, the stricture fairly split, and the dilator removed. A No. 12 catheter was next passed, and the urine withdrawn; the bleeding was very trifling. Ordered a mixture of quinine and opium, two grains of the former and ten drops of the latter for a dose. In the evening he felt chilly and uncomfortable, but had no shivering; the urine flowed with moderate ease, and was triflingly tinged with blood.

On the following day he was able to walk about the ward, the urine came away in a small but clear stream, the medicine was omitted, and his ordinary diet resumed.

On the second day after the operation, a No. 12 catheter entered the bladder without the least difficulty, the urethra was tender, but he did not experience so much pain as on former occasions, the after treatment was continued at increasing intervals, and he shortly left the Hospital capable of passing his own instrument.

The foregoing is a case of very considerable interest, as embracing many of the most important points in connexion with stricture. The duration of the disease, the manner in which micturition was accomplished, the deplorable state of the patient's health, the supervention of "stricture fever" after every attempt at catheterism, the after establishment of false passage, and the profuse hæmorrhage, are all evidences of the serious nature of the case, and consequently presented a severe test to the adopted treatment, and the perusal has, I hope, satisfactorily shown, immunity from fatal consequences, rapidity of recovery, and complete restoration of the urethra to its natural size.

Case 2.—Stricture of Fourteen Years' Standing—Of a Dense Cartilagious Charaeter—Situated about the Triangular Ligament—Urine, which was Ammoniaeal and Purulent, passed Guttatim—Operation—Reeovery.

John W., aged 45, a labourer, was admitted in December, suffering from stricture of the urethra, of fourteen years' duration. Seven years since, the urine having been for some weeks previously passed guttatim, he had retention, and applied at St. George's Hospital, where after considerable difficulty a eatheter was introduced. He continued an in-patient until No. 4 could be passed, and then left, much improved both in health and manner of micturition. The stricture, however, gradually returned, and after several attacks of retention, and a generally increasing difficulty in relieving himself, he became an in-patient at the Westminster Hospital. At the time of his admission, the urine was passed every hour, with great straining, and frequently in drops, there was considerable hardness in the perinæum, and his health was much damaged, as evinced by emaciation, pallor, loss of appetite, sleepless nights, and general feverishness, the urine was highly ammoniacal, and loaded with mucus and pus. A No. 1 silver catheter was attempted without success, there was complete obstruction at the triangular ligament, and although the point was firmly grasped, it could not be made to penetrate through the stricture. The patient was kept in bed and the bowels regulated, and on the third day from his admission, another attempt was made in the most gentle manner, but with no better result. Considerable irritative fever followed the two trials, and it was only after the expiration of two months, during which time six endeavours were made, that a No. 1 catheter was passed. The stricture was of the cartilaginous variety, about an inch in length, and gave that peculiar grating to the catheter so specially characteristic of cartilaginous obstruction. A large quantity of highly-offensive urine was withdrawn, and the catheter was retained. On the following day, a larger size was substituted, and on March 4, the patient having been placed under the influence of chloroform, the dilator was with considerable difficulty introduced, and the No. 12 tube immediately passed. A No. 12 catheter was then easily slipped in, and the urine withdrawn. On the following day there was no febrile disturbance, and the patient declared he made water better than he had done for many years. On the succeeding, or second day after the operation, the urine was passed in a smaller stream, and with some scalding, consequently a No. 11 catheter was used, the urine was much less fetid and less in quantity than before. The stream continued small for a fortnight, but the urine was expelled in a much shorter time, and the frequeney of micturition had materially diminished, he now only required to relieve himself three times during the night, and the same during the day. The No. 11 having been passed on alternate days, a No. 12 was now taken, and used every third and every fourth day in the manner already described. Six weeks after the operation he left the Hospital, making water in a perfectly natural manner, having been taught to pass a No. 12 with ease.

The foregoing, one of a class that offers the greatest impediment to the introduction of a eatheter, is an excellent example of a formidable cartilaginous obstruction situated at a part of the urethra which, corresponding to its curve, gives greater trouble in the introduction of an instrument than any other. The patient had been the subject of stricture for many years, his urine had for months previous to his admission been passed guttatim, his clothes were constantly saturated, and his health was materially damaged by the hourly necessity for relief—an evil which depended upon the stricture, as proved by the large quantity of urine that was withdrawn when a catheter was introduced. All these difficulties were immediately overcome, and a large-sized catheter could be ever afterwards introduced with perfect facility. The offensive ammoniacal condition of the urine gradually abated, that fluid assumed a normal character, and the bladder being no longer irritated by its detention, the intervals between the time of micturition were prolonged. In a word, the patient was restored to complete comfort without having been detained in bed more than a day, and without experiencing a single unfavourable symptom, indeed, he did not suffer in the same ratio as during the attempt to simply introduce a catheter. To those who are uninitiated in the treatment of stricture, it might appear that by keeping a catheter in the bladder, and daily increasing the sizes, the same results would have been obtained, but experience proves this plan of treatment to be utterly futile, and that as soon as the catheter is removed, so soon does the stricture return.

Case 3.—Strieture at the Bulb of Twenty-eight Years' Standing—Frequent Attacks of Retention of Urine—Infiltration—Fistulæ in Perinæo and Serotum—Enlargement of the Prostate Gland.

H. R., a captain in the Navy, aged 58, consulted me after having for many years been suffering from the effects of stricture. He had had repeated attacks of retention of urine, and upon three occasions matter formed behind and in the scrotum, which eventually gave rise to fistula in those situations. At the time of his coming under my care, the greater portion of the urine escaped through these apertures, so that he was always compelled to make water in a sitting posture, or with the aid of an earthenware slipper held between the legs. His clothes were constantly saturated with

these dribblings, and his health was materially damaged by constant straining, and the frequency with which he was compelled to make efforts to relieve the bladder. He had been under the care of many Surgeons, both in London and elsewhere, but without obtaining amelioration to his sufferings. Having tried various sized and kinds of instruments, I was fortunate enough, at the expiration of three weeks, to get a 0 0 silver catheter through the obstruction. This instrument was retained, and replaced by a larger size, until No. 3 could be passed, when the dilator was introduced, and the No. 12 tube immediately passed. The same after treatment was adopted as in the preceding cases, and in three months from his first visit he was enabled to pass No. 12 without difficulty. The stream was good, the intervals much longer, and his health better than it had been for the previous seven years.

Another very similar case may be added, viz. :—A gentleman, a solicitor by profession, was affected with a stricture of many years' standing. He had for ten years experienced great difficulty in emptying his bladder, and the urine was loaded with mucus. Upon the first examination the catheter was arrested at three inches from the meatus; after some trouble it passed on to a second obstruction, near the membranous portion of the urethra, through which it was impossible at the time to penetrate. Upon subsequent trials, however, I got through the second obstruction, and came upon a third, nearer the bladder, which was eventually overcome. The dilator was at once introduced, and the three strictures split. A No. 12 catheter was immediately pressed in, and the urine withdrawn. Considerable pain was for a time experienced in this instance in expelling the urine, which was only effected with great straining. The cause, however, of this suffering was speedily apparent, for the patient passed three small calculi, which had formed behind each of the obstructions, and were washed away when the urethra became enlarged.

(To be continued.)

HOLIDAY NOTES ON SOME CONTINENTAL SPAS.

By HERMANN WEBER, M.D.
Physician to the German Hospital.

As it has, of late, become more and more the habit for a certain class of patients to visit foreign watering-places, I comply with the invitation of some friends to communicate short notes on a few foreign Spas visited on my holiday excursion.

These notes, penned as they have suggested themselves, during a visit to the place, have, of course, no pretension whatever of representing a complete account of the Spas to which they refer; but they relate only to some of the principal points of consideration for Medical men,—as the situation of the Spas, the nature of the springs, the complaints for which they are most frequently resorted to, the Physicians, the manner of living, and the accommodation.

Vichy is a small town in the department of Allier, about 250 miles south from Paris. It is reached from Paris in eleven hours. St. Germain les Fossés is the nearest station on the line from Orleans to Lyons, and rather more than seven miles from Vichy, which is situated in the valley of the River Allier, 787 feet above the level of the sea; it is surrounded by hills covered with vines, fruit-trees and cultivated fields; the aspect of the country is pleasing, but rather tame; the air fresh and dry in the mornings, but, as usual on the Continent, much more calm than in England, and through this, more oppressive on warm summer days. Accurate meteorological observations do not appear to exist—at all events, I have not been able to obtain them; but as far as I can learn, the months of July and August are very hot, the temperature in the shade having been this year, according to Dr. Dubois, repeatedly above 110° F. The neighbourhood of the mountains of the Auvergne is said to cause frequent storms, and with them great and sudden changes of temperature. In September the temperature is more moderate; it would therefore appear to seem the most proper month for a stay at Vichy, but strange enough, the place is crowded during the hottest months, and begins to become empty already in the beginning of September. The people of the district of Vichy do not appear remarkable for strength and bodily development, but rather stunted in growth; bad food and hard labour, however, to a great degree account for this; it ought, therefore, not to be considered prejudicial to a transitory stay at Vichy.

The number of mineral springs at Vichy is considerable, and also the whole neighbourhood (Hauterive, Cusset, D'Abrest, St. Yorre) abounds in springs of a similar constitution. All the springs belong to the class of the carbonated alkaline, bicarbonate of soda being the predominant constituent; but they exhibit great difference with regard to their temperature. The following Table shows the nature of the different springs according to the analysis of M. Bouquet.

It will be seen that the water of "Hauterive" is by far the richest in carbonic acid; it is principally to this property, we should think, that it owes the advantage of being best suited for exportation, suffering scarcely any alteration during long journeys. All the waters are limpid, and have, in consequence of the considerable amount of carbonic acid, a rather pleasant taste. In most of them a slight smell of sulphuretted hydrogen is perceptible, but it is not discoverable by chemical tests. The quantity of iron is, in some, slightly greater than in others, but it appears to be in none of them large enough to indicate for them the appellation of chalybeate, as some of the friends of the Spa assume for the springs

A Litre Contains	Names of the Springs.									
	Grande Grille.	Puits Chomel.	Puits Carré.	Source Lucas.	Source de l'Hôpital.	Source des Célestins.	Source du Parc.	Source Lardy.	Source des Mesdames.	Hauterive.
	grm.	grm.	grm.	grm.	grm.	grm.	grm.	grm.	grm.	grm.
Free Carbonic Acid	0·908	0·768	0·876	0·751	1·067	1·049	1·555	1·750	1·908	2·183
Bicarbonate of Soda	4·883	5·091	4·893	5·004	5·029	5·103	4·857	4·910	4·016	4·687
,, Potash	0·352	0·371	0·378	0·282	0·440	0·315	0·292	0·527	0·189	0·189
,, Magnesia	0·303	0·338	0·335	0·275	0·200	0·328	0·213	0·238	0·425	0·501
,, Strontia	0·003	0·003	0·003	0·005	0·005	0·005	0·005	0·005	0·003	0·003
,, Lime	0·434	0·427	0·421	0·545	0·570	0·462	0·614	0·710	0·604	0·432
,, Protoxide of Iron	0·004	0·004	0·004	0·004	0·004	0·004	0·004	0·028	0·026	0·017
,, Protoxide of Manganese	traces	traces	traces	traces	traces	traces	traces	traces	traces	traces
Sulphate of Soda	0·291	0·291	0·291	0·291	0·291	0·291	0·314	0·314	0·250	0·291
Phosphate of Soda	0·130	0·070	0·028	0·070	0·046	0·091	0·140	0·081	traces	0·046
Arseniate of Soda	0·002	0·002	0·002	0·002	0·002	0·002	0·002	0·003	0·003	0·002
Borate of Soda	traces	traces	traces	traces	traces	traces	traces	traces	traces	traces
Chloride of Sodium	0·534	0·534	0·534	0·518	0·518	0·534	0·550	0·534	0 355	0·534
Silica	0·070	0·070	0·068	0·050	0·050	0·060	0·055	0·065	0·032	0·071
Organic Matter (Bituminous)	traces	traces	traces	traces	traces	traces	traces	traces	traces	traces
	7·914	7·969	7·833	7·797	8·222	8·244	8·601	9·165	7·811	8·956
Temperature	108°50	110°48	110°48	83°3	89°06	59°36	71°60	75°02	62°60	59°00

"Lardy," "Mesdames," and "Hauterive," in which the proportion is largest. The quantity of arsenic, on the contrary, though absolutely smaller than that of iron, appears yet quite large enough to be considered an important element. The landlord of the Hotel Guillermen remarked to me, that many of his guests, who when arriving, had been thin, had perceptibly gained flesh during their stay. He simply ascribed it to the good food he furnished, but although this deserves great praise, yet as many persons gain weight while taking small doses of arsenic, I was inclined to bring the observation of my landlord in some connexion with the arsenic contained in the Vichy waters. The per-centage of this substance is largest in the springs "Lardy" and "Mesdames." Some of the springs are natural, as "Puits Carré," "Puits Chomel," "Grande Grille," "Lucas," "Hôpital," "Célestins" (old and new); others have been obtained by boring, as "Lardy," "Mesdames," "Du Parc," "Hauterive;" the former include the really thermal, the latter the colder springs.

There is a handsome *Etablissement les Thermes*, in which there are three of the principal springs for drinking, "Grande Grille," "Puits Chomel," and "Mesdames," and in which almost all the baths are given. The baths are of copper with a tin coating, a clean sheet of linen is spread over them before they are filled with water; the temperature of the water of the bath is about 34° or 35° C. (93·2° to 95° F.); the water consists of half mineral water, half common water, and the mineral water used for the bath, is a mixture of several springs ("Puits Carré," "Grande Grille," "Lucas"). About 2800 baths can be given daily; the time for each bath, including dressing and undressing, being seventy-five minutes.

The reason given me by Dr. Willemin and Dr. Durand-Fardel for the admixture of common water is, that the use of the undiluted mineral waters would be too exciting; but why this should be so in all cases I cannot understand. I should think that some patients would derive more benefit from a stronger bath, others from a weaker, just as in the German Spas of Nanheim and Kreuznach, in many instances, the admixtures of various quantities of mother-lye to the usual saline water is found desirable, while in others even a dilution of the saline water is required.

The Thermal Establishment is under the superintendence of an Inspector (Dr. Alquié), and two Deputy-Inspectors (Dr. Dubois and Dr. Willemin). There is an Hospital for the poor, containing sixty beds, under the direction of Dr. Alquié, and there is besides a very well-conducted Military Hospital, under the direction of Dr. Barthez. This Hospital admits annually during the season 450 officers and soldiers. Here there is an excellent opportunity for clinical observation on the influence of the waters, as the patients are under a regulated diet while in the establishment, their previous history is known through a report from the former Medical attendant, and after the lapse of a year from the date of the discharge, another report is sent to the Hospital, stating the condition of the patient during the interval. The baths given in this Hospital consist in general of the undiluted mineral water.

Although it would be of interest to compare the constitution of the waters of Vichy with other thermal carbonated alkaline waters, especially those of Ems in Nassau, and the lately discovered springs of Neuenahr, in Rhenish Prussia, we must restrict ourselves to a very few observations. The springs of Vichy are richer in bicarbonate of soda than any others we are acquainted with; while sixteen ounces of the Grande Grille and most of the other sources of Vichy contain about twenty-nine grains of bicarbonate of soda, those of the "Krähnchen" at Ems contain less than ten grains, and those of the various springs at Neuenahr less than six grains; the springs of Ems and those of Neuenahr possess rather more carbonate of magnesia, and the waters of Ems, in addition, more culinary salt than those of Vichy; the quantity of carbonic acid gas in the springs of Ems and Neuenahr is about equal to that contained in those of Vichy, which are richest in this constituent. The temperature of the "Krähnchen" at Ems is about 99° F.; that of the "Kesselbrunnen" at the same place, 117°; the springs of Neuenahr vary between 87° and 101°; those of Vichy between 59° and 110°.

With regard to the important question of the action of the Vichy waters on the system, the visible physiological effects, as far as they relate to the quantity and appearance of the fæcal excretions, of the perspiration, and of the urine, are not striking; in very few persons the waters act as aperients, in some the perspiration becomes increased, and in most persons the quantity of urine is augmented. The free acidity of the urine is always diminished; the urine becomes in some persons very soon alkaline, while in others only after the ingestion of a much larger quantity of the same waters; in some a bath of twenty minutes is sufficient to render it alkaline, while in others this effect is not observed. A slight feverish excitement, want of appetite, and lassitude, are observed occasionally after the water has been taken for a few days, but these symptoms pass off in general very soon. All these points, however, are of less physiological importance than the question, how the Vichy waters influence the metamorphosis of matter—whether, and to what degree, they produce an increase or decrease in the excretion of the urea—how in that respect the bath alone acts—and how the internal use of the various springs alone, and how the combination of the external and internal use of the springs. On this subject, I am sorry to say, I have learned but little from our otherwise excellent *confrères* at Vichy; here certainly is still a large field for them to work on, in a similar manner as Bencke (a) has done, and is doing, with regard to the muriated saline springs of Nanheim, in Hesse-Cassel. I may state that some years ago I made a few experiments on myself with the exported water of the Grande Grille, and found constantly a perceptible increase of urea a few hours after the ingestion of the water, but these experiments were too limited to be of much value.

To assignate to the Vichy waters, and to the carbonated alkaline waters in general, the term "solvents," and assume that they simply "dissolve" by their chemical properties the concretions of uric acid and its salts, and also the biliary concretions, and the thickening of membranes, and other products of congestion and chronic inflammation, as we hear it often done, exhibits a very primitive manner of applying chemistry to vital processes. The waters act, no doubt, by their chemical properties, but not by merely "dissolving." Waters which contain scarcely any alkalies, as those of Homburg, of Kreuznach, of Nanheim, possess likewise the property of removing the products of congestion; they cannot do it by mere chemical "solution," but do it by an alteration in the metamorphosis of tissue, in the process of nutrition; and it is in this manner only that the action also of the Vichy and other carbonated alkaline waters can be understood. The presence of alkalies in the blood, we have reason to believe, mediates the union of oxygen with the non-nitrogenous substances, and diminishes, through this, the amount of non-nitrogenous acids, the presence of which, in an immoderate quantity in the animal fluids may be considered as the cause of many chronic disturbances. The alkalies seem also to cause a more regular flow of bile, perhaps likewise only indirectly, by causing an alteration in the blood.

(To be continued.)

CASES ILLUSTRATIVE OF THE INDEPENDENT LIABILITY OF THE FŒTUS TO DISEASE

By LOUIS R. COOKE, M.R.C.S.
Accoucheur to the Royal Pimlico Dispensary.

The subject of the independent liability of the fœtus in utero to epidemic and visceral diseases is still involved in so much obscurity, and so many conflicting theories, and so much contradictory evidence, have been brought forward in relation to it, and to the data upon which all mere argument on the subject must be based, viz., the anatomical relations of the maternal and fœtal circulations, and the mode of nutrition of the fœtus, etc., that it seems we are more likely to arrive finally at distinct conclusions on the matter by the collection of facts, than by any amount of induction founded upon the researches of speculative pathology.

The following cases (especially the latter) appear to offer affirmatory evidence on the subject:—

Case 1.—Mrs. G., a young woman, vaccinated in early life, called me in to attend her during parturition, she being at the time in perfect health, in all respects separable from the parturient condition. She was delivered, after a common-

(a) Dr. Beneke's work "On the Action of the Waters of Nanheim" has been ably translated by Dr. Sutro.

place labour, of a full-grown live male child, covered with the eruption of variola in the fully maturated pustular stage of the disease in its discreet form; on the second day, however, the disease became universally confluent, and the infant ultimately died with convulsive symptoms. During the first four days following its birth, the health of the mother continued to warrant the hope that she was about to escape—a hope which I based upon the fact of her previous vaccination; this, however, turned out not to be the case, as on the fifth morning papulæ became apparent, and she eventually went through, and recovered from, a pretty severe attack of the disease.

This, case which I have had in my note-book for some months, offers no points of difference from those related by Jenner, Mead, and Mauriceau as having happened in his own person, of a nature to constitute additional evidence on the subject; still, I think it may be fairly asked, bearing in mind the long apparent precedence of the disease in the child, whether it does not excuse the dictum of the author who affirmed that disease of the ovum is more injurious to the mother than is maternal disease to the ovum.

Case 2, which came under my observation very lately, is, however, much more to the purpose, and indeed is as conclusive as any single case can well be.

A poor woman, the wife of an artisan, but living under unusually favourable conditions as to light, ventilation, and cleanliness, and from whom subsequent enquiries elicited that she had never been subject to any form of skin disease, applied to me to attend her during her confinement. The child was born with a beautifully-marked eruption of herpes zoster, extending from the central spinal line across the angle of the right scapula, and round to the anterior mesial line of the ensiform cartilage. This followed the usual course of the disease, lasting about five days, and leaving, therefore, the presumption in my mind that it must have existed for at least an equal time in utero. Subsequent examination of the mother gave no trace of a similar condition in her; neither was it possible to establish any remote connexion between it and external causes, by discovering an herpetic eruption on the genitals of either of the parents. Nor was it possible to attribute the appearance to the pemphigoid eruption of the French authors, the result of the syphilitic cachexia, as the history and general appearance of parents and child were opposed to the supposition, and the form and grouping of the vesicles, the uniform width of the band of eruption, its seat, the healthy condition of all other portions of the skin, and the spontaneous decline of the disease, were sufficient evidences of its nature.

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REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

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AND BY

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REPORT ON SYPHILITIC INFLAMMATIONS

OF THE

RETINA, CHOROID, AND VITREOUS BODY.

(Continued from page 271.)

Case 8.—*Adhesions in both Pupils, with Extensive Choroidal Disease in both Eyes—History of Repeated Inflammatory Attacks between the Ages of* 22 *and* 25*—No other reason to suspect Syphilis either Hereditary or Acquired.*—M. S. B., aged 25, healthy looking, from the country, a farmer's daughter, of respectable family. Neither teeth nor physiognomy present any peculiarity suggestive of hereditary taint. On the contrary, she is of good complexion, and florid.

Three years ago her left eye inflamed for the first time. A year later the right eye was attacked, and at the same time the left one also again suffered. She has since had several distinct attacks; one, in which both suffered severely, was about two months ago. She has several times been profusely salivated, but denies ever having had any rash or sore throat. At the time of the first attack M. S. B. states that she was much out of health—suffering from dyspepsia and debility—but she denies, with simplicity and apparent truthfulness, having had any rash whatever.

State of the Eyes.—Both pupils are extensively adherent, and dilate very irregularly on the use of atropine. There are thin films extending across the pupils, and it is with difficulty that the fundus can be inspected in either. In the choroids are numerous white patches (sclerotic), some of them abruptly circumscribed, others with ill-defined borders. The choroids generally are thinned, and in some places large masses of black pigment are scattered about. There is no congestion of the globes at present. As to vision, she can still see to read ordinary print, but only very slowly and with much difficulty.

Mr. Dixon also examined the eyes, at my request, and agreed with me that no doubt could be felt as to the specific nature of the disease. I put questions on the subject to a female relative who came with her, and was assured that no suspicion could be entertained. The throat, mouth, and skin of arms, etc., were inspected, but nothing discovered which bore out the diagnosis. She is the youngest child in the family, and the others are reported to be delicate.

Notwithstanding the entire absence of corroborative history, yet from the nature of the disease—iritis and choroiditis in combination—its symmetry, and the age at which it occurs, I cannot feel any doubt that in this case the patient is really the subject of acquired syphilis. The case is a very interesting and important one. Had either the iritis or the choroiditis occurred singly, there would have been more room for doubt.

Case 9.—*Constitutional Syphilis—Inflammation of the Retina and Hyaloid of One Eye Four Months after the Primary Sore.*—Mary J., aged 22, married, was admitted under my care, at the Metropolitan Free Hospital, on April 9, 1861. She came on account of constitutional syphilis, and acknowledged having had primary sores four months before. Her symptoms when admitted were—condylomatous patches on the dorsum of the tongue, on the lower lip, and on the pharynx. She also complained of much headache, and had profuse leucorrhœa. It was not until a fortnight later that I knew of her eye being affected. On April 23 I quite accidentally noticed that her right pupil was nearly twice the size of the other, and found on trial that it was insensible to light. There was not the slightest external congestion, the mydriasis being the one symptom which drew my attention to the eye. On being questioned, she told me that for two months this eye had been "dim and misty," and that she had had a good deal of pain in her forehead and through the globes, "like needles sticking through the eyes." The pain had not, however, been enough to keep her awake at nights, and as she could still see perfectly with the other eye, she had not thought the symptoms described worth mentioning. I found on trial that she could not count fingers with the affected eye. There was no iritis and not the slightest intolerance of light. The pupil dilated widely under the influence of atropine. With the ophthalmoscope the following conditions were discovered and were demonstrated to numerous observers who were present:—The retina was congested and deficient in transparency, looking as if seen through gauze. In the vitreous was a single large floating body, which in some positions looked black and opaque, in others filmy and whitish. There was no diffused turbidity of the vitreous. As usual, the retina bore the examination without appearing in the least irritated by it. In the other eye no morbid conditions were observed. Up to the date at which I discovered the state of her eye, no specific treatment had, for special reasons, been adopted. We now at once commenced the employment of mercurials. A pill containing half-a-grain of calomel and half-a-grain of opium was ordered three times a-day, together with a draught containing five grains of iodide of potassium. On May 7 she was so far improved as to be able to make out large letters. Her gums were slightly affected by the mercury, and the pill was consequently omitted.

May 28.—The pupils are now of equal size, and equally sensitive to light. She can see to read ordinary type with the affected eye. The iodide of potassium is still continued. With the exception of the leucorrhœa, the other symptoms have disappeared.

Case 10.—*Syphilitic Retinitis in one Eye—Copious Effusion of Lymph—Syphilitic Rash, etc.*—Mrs. V., aged 23, had been for some time, several years ago, under my treatment, on account of contracted cervix uteri. On August 6, 1861, she applied to me with the statement that she had lost the sight of her right eye. I found her now with a very well characterised syphilitic rash on the arms, trunk, and neck. This rash, she said, had been out for about six months. Before it came out she had suffered from discharge, but was not aware that there were any sores; afterwards her throat was very sore. According to her account no specific treatment had been adopted until a fortnight ago. She had lost much flesh, and her aspect was decidedly that of syphilitic cachexia.

She stated that her eye first began to be dim about five months ago, and she then applied at an Ophthalmic Hospital. "It was as if she looked through dirty water." She had no material pain at first, but the dimness increased; no specific remedies were used. Ten days ago she rather suddenly became quite blind in the affected eye, and had also severe pain in the globe.

August 6.—The right eye is slightly congested and irritable. The pupil dilates well with atropine, and there are no adhesions. The iris is, however, somewhat muddy. The reflex obtained is one uniform yellow grey; no vessels are visible, nor can the optic disc be discovered; no floating portion can be seen. The fundus of the other eye is normal.

In September the eye was carefully examined at the Ophthalmic Hospital. She could now just see the shadows of fingers. The whole vitreous was opaque and of a foggy, white grey appearance. On looking closely without the lens its dissepiments were easily seen; they were somewhat tremulous; not the slightest glimpse of the retinal vessels or optic disc could be obtained. Although Mrs. V. asserted that she could see well with the other eye, yet on ophthalmoscopic inspection I found a large, abruptly-circumscribed patch of effused lymph between the choroid and retina, very near to the yellow spot. Its surface was greyish yellow, its margins yellow and fringed; several retinal vessels were seen crossing it. On being again questioned Mrs. V. admitted that her sight with this eye was not usually good; for instance, she could not thread her needle, but comparing it with the left she had not considered that there was anything worth mentioning.

A week after the last note, the right eye was attacked with acute iritis attended with most severe ciliary pain. For this the patient is still attending. Great difficulty has been experienced in influencing either the disease or the constitution by mercury; although four grains of calomel have been given daily in divided doses for nearly a month, yet no ptyalism has been induced. The eye is slowly improving as to pain, but there appears great reason to fear that sight will not be restored.

Case 11.—*Syphilitic Inflammation of Retina and Hyaloid—History of Primary Disease Three Months before—Recovery under Mercurial Treatment.*—Mrs. W., aged 34, the wife of a commercial traveller in Yorkshire, came under my care in March, 1861. She was pallid and out of health. Her left eye only was inflamed, but in the right cornea was an old opacity which had for years prevented any useful vision, and which now also prevented ophthalmoscopic examination. The sclerotic of her left eye was considerably congested, but there was no perceptible iritis. She complained that she saw a fog before the eye, and described severe circumorbital pain, from which she had suffered for about a fortnight. Previous to the attack her sight had been perfect in the inflamed eye. At present she could not read No. 16, and could only distinguish capitals. On using atropine the pupil dilated widely, but with a single tag of adhesion at its lower part. The vitreous was hazy, and it was with some difficulty that the fundus could be seen distinctly. The margins of the optic disc were ill-defined, owing to the effusion of a thin deposit of lymph. The trunks of the vessels were here and there concealed by minute dots of lymph. The area of inflamed retina extended widely but irregularly around the optic disc, including the yellow spot. These conditions, of course, suggested a syphilitic history. I found, on inquiry, that she had had what she learnedly termed "pruritus" about three months ago, after which a rash made its appearance, and was attended by sore throat. On her arms were still to be seen numerous copper-coloured blotches, the remains of the rash, and both tonsils showed the evidences of recent ulceration. The Medical man under whom she had been treated had considered the disease venereal, but she had not been salivated.

At my request Mrs. W.'s husband came to see me; but he stoutly denied having had any venereal affection.

The treatment consisted in local bleeding and the use of calomel and opium, with full doses of iodide of potassium. Ptyalism was rapidly induced, and the sight improved surprisingly. On April 11 (about a fortnight after the treatment was begun) she could read "Brilliant type" with the affected eye, and the pain was wholly gone. The haziness of the vitreous and retina was much less. A mild specific treatment was still continued. On May 16 she returned into Yorkshire, having almost perfectly regained her sight. A slight occasional mistiness was now her only symptom. The margins of the optic disc were now clearly defined, and the retina had to a great extent recovered its normal condition of transparency.

Case 12.—*Double Iritis with Inflammation of the Vitreous Body and Retina in Both Eyes—Opacity of the Vitreous with Floating Film in the Left—Treatment by Iodides—Left Vitreous still Opaque a Year after.*—The following case is valuable on account of the prolonged period over which the notes extend. It appears probable that one of the eyes has been permanently lost by inflammation of the vitreous body:—

A. J. L, a pale young man, aged 21, of fair complexion and delicate appearance, was admitted under my care on October 18, 1860. He came on account of subacute iritis in the left eye, and stated that he had had an attack in the right one month before. The right pupil dilated fairly under atropine, but some tags of adhesion with much pigment were made visible. The left dilated very irregularly, being adherent by recent lymph at several spots. The symmetry of the disease and the age of the patient left little doubt that syphilis was its cause; but the history obtained was imperfect. About a year ago he had "a running," but no mercurial treatment was thought necessary by his Surgeon, nor was it followed as far as could be made out, by any secondary symptoms, the iritis excepted. He had been salivated for the iritis in the right eye. The left had been inflamed about a week. In neither had the attack been attended by much pain. Atropine drops were ordered, and a grain of calomel with a quarter grain of opium twice a-day.

On October 22 I dictated the following note:—"Both pupils widely dilated without adhesions visible to the unassisted eye. With the ophthalmoscope, pigment patches are seen in front of right lens, and the right vitreous body is dim and full of opaque moving films. In the left eye the vitreous is muddy, and some very fine films are seen. The left retina is hazy. The right retina cannot be seen." Ordered ten grains of iodide of potassium three times daily. Omit pill.

October 25.—Much better; pupils well dilated.

November 1.—Sight much improved. Repeat the mixture.

8th.—The right retina can now with difficulty be brought into view. It is hazy and greatly congested. The edges of the optic disc cannot be distinguished.

15th.—He is now quite free from pain. Can read with the left, but not with the right.

With some omissions he continued the full dose of iodide of potassium regularly, from October 22 to January 3, greatly improving both in health and in sight during its use. At the latter date it was changed for a draught containing five grains of iodide of potassium, and five minims of tincture of iodine, which was continued steadily until April 1. At the last date he still remained without any useful vision in the right eye, and its vitreous was still opaque and containing films.

During the summer of 1861 he did not attend, but on October 14 he again presented himself. He now complained that his right eye was getting worse, and that he could scarcely see at all. On examination it was found that he could but just distinguish shadows with it. The pupil was clear and the iris dilated fairly. He said that the eye had been getting worse for a month. It was not congested, and beyond a little aching, there had been no pain. He could read easily with the left. On ophthalmoscopic examination I found his left vitreous so opaque that the optic disc could not be brought into view. Here and there a retinal vessel could just be distinguished, as if through thick fog. In all parts of the vitreous were slender filaments of opaque membrane, which were thrown into quivering motion by all movements of the globe. In the left eye both retina and vitreous had wholly recovered.

As the opaque state of the vitreous of the right eye has now existed for a year, with relapses and in spite of treatment, it is much to be feared that it will be permanent, at any rate in some degree. It will be observed that reliance was chiefly placed on iodide of potassium in the treatment, the man's feeble state of health being held to discourage the use of mercury. He had, however, been salivated before coming to the Hospital, and calomel was given during the first three days of his attendance. No other symptoms of constitutional syphilis have occurred, but I feel no doubt as to the correctness of the diagnosis in this respect.

(To be continued.)

A SURGICAL REPORT OF THE

CASES ADMITTED INTO

UNIVERSITY COLLEGE HOSPITAL,

FROM THE LATE ACCIDENT ON THE

NORTH LONDON RAILWAY.

By Mr. GANNON, House-Surgeon.

Patients under the care of Mr. MARSHALL, acting for Mr. QUAIN.

(Continued from page 377.)

Case 14.—*Severe Wounds of Leg and Scalp.*

Elizabeth W., admitted in a state of collapse. Pulse small and weak; perfectly conscious; surface cold; countenance pale. On examination were found a large scalp wound over right side of head, with exposure of bone; no fracture to be detected; also a contused and lacerated wound over left tibia at middle third of leg; the bone was also exposed in this situation, and a probe passed in felt a ridge in the bone, as if it had been penetrated by a sharp instrument. There was also a good deal of bruising about right eye, and contusion of left foot and ankle. Tuesday, September 3.—Patient much better this morning; seems to have recovered entirely from the shock; water dressing applied to wounds. 7th.—Wound over tibia greatly inflamed, and presents a sloughy appearance: poultice applied. 9th.—A distinct erythematous blush over wound on left tibia; pulse quick; skin hot; tongue rather coated; wound on head doing well; fomentations and poultice to leg. 10th.—Leg much better; redness rapidly disappearing; bowels open; appetite moderate. 17th.—Since last note patient improved in every respect; wound on leg is now granulating healthily; exposed bone still felt; wound on head doing well. 23rd.—Exposed bone in scalp wound very dry and white; margins of wound healthy; no tendency to slough; otherwise patient better.

Case 15.—*Dislocation of Seventh Rib and Fracture of Jaw; Cardiac Friction Sound—Recovery.*

Edward E., admitted September 2 in a state of collapse; surface cold; pulse weak; on listening to chest a distinct friction sound is heard over præcordial region, and dullness over right side of chest, with absence of respiratory murmur over whole of right side. Dislocation of seventh rib on the cartilage, and a transverse fracture of left side of symphysis of lower jaw; also some bruising about left shoulder. Tuesday, September 3.—Patient much improved this morning; complains of no pain in chest; all the symptoms of last night disappeared; four-tailed bandage placed on jaw; pulse 84; respirations 28; louder left side than right; some blood effused into conjunctiva of left eye. 10th.—Is much better, but feels some little pain about chest; a small abscess is forming below jaw opposite seat of fracture; complains of no pain in chest, except when he tries to rise. 14th.—The abscess was opened to-day; does not communicate with the fracture; discharges freely. 21st.—Patient now able to get up and walk about the ward; complains of pain over left shoulder; first incisor tooth on left side of lower jaw was removed, it being decayed, and pus from abscess had found its way out by the side of it; the teeth on either side brought together by silver wire.

Case 16.—*Laceration of Scalp and Severe Concussion.*

Samuel H., aged 39, admitted September 2, on account of the railway accident. On admission were found:—1. A large scalp wound three inches in length over right parieto occipital region; bone being exposed; no fracture to be detected. 2. Slight contusion of forehead. 3. Ecchymosis of left eye-lid. Pupils small, but act equally; patient is very violent; entirely unconscious of external objects; feet cold; pulse small; wound dressed, and patient left quiet; no stimulant administered. Tuesday, September 3.—Passed a very restless night, was continually rolling, or attempting to get out of bed; is still insensible; when roused makes a hasty reply, and then relapses into a drowsy condition; pulse small and weak; feet and surface of body generally cold. Ordered ℞ Hyd. chlorid. gr. v. statim; also ℞ Euema terebinth Oj. cras mane. 4th.—9·30 a.m.—Pulse 66, regular; moderately full; skin cool; tongue moist, coated; head hot; lies in a semi-comatose state; answers simple questions correctly, but immediately relapses into the same state. 7·30 p.m.—Pulse 68, same character as in morning; very restless at times; great difficulty to keep him in bed; bowels open freely; passes his water naturally. 5th, 10 a.m.—Pulse 65, regular, full; still lies in a drowsy condition. Tongue coated with a white fur; wound on head doing well; pupils rather dilated, but act. Ordered: Mist. pot. citratis ℥j. sextis hôris. 9 p.m.—Pulse 72. More watchful. Complains of great pain in head; little more heat about head. Pupils act. Conjunctivæ slightly congested. 6th, 10 a.m.—Pulse 72, regular. Seems more conscious; cries out directly wound on head is touched. Has been very restless during night. 7.30 p.m.—Pulse 68; skin cool; tongue moist; more easily roused. 7th, 10 a.m.—Much more conscious; states he feels better, but complains of headache, and a general feeling of depression and great weakness; expression dull, melancholy; wishes to be left alone. Pulse 72; respirations 34; skin moist; tongue moist and white; head feels hot; pupils act; bowels open; passes his water freely. 7.30 p.m.—Sleeping. Pulse 60; respirations 32. Patient about the same as in morning. Ordered: ℞ Hyd. chlorid. gr. j. sextis hôris. 8th, 10 a.m.—Still complains of pain in head; gums slightly affected by the calomel. Ordered to discontinue the calomel, and also the mixture, and to take the following: ℞ Mist. effervescens ℥j.; ammon. carb. gr. iij. Ft. haust. sextis hôris. Pulse 60, weak; respirations 17; tongue moist; skin cool. 8 p.m.—Pulse 64; respirations 14. 9th.—Passed a restless night. Pulse 64; respirations 19. Frequently sighing; head still very hot; wound doing well; no tendency to bagging of matter; bowels open; skin cool. Ordered: ℞ Tinct. hyoscyam. ℥j; mist. camphoræ ℥j. Ft. haust. omni nocte. 10th.—Pulse 60. Feels better, but still very weak; no pain except in region of wound and a little over forehead; slept well at intervals last night under the influence of the henbane; lies in a drowsy state, sighing frequently. 11th.—Pulse, 62; tongue moist, whitish; pupils equal, act under light; his countenance is peculiarly melancholy and despondent; feels a heaviness in his head; no apparent paralysis of any part; hears well with left ear, but indifferently with right ear; complains of coldness in feet; bowels open; slept pretty well. 13th.—Pulse 64, regular, fair in volume. Is decidedly improved; the drowsiness and sighing have all but disappeared; seems much more rational; wishes to get up; slept well; still complains of pain in head. Ordered to discontinue his anodyne. 14th.—Pulse 62, regular, full; bowels open. Sat up yesterday for a short time; complains of weakness; expression of countenance very anxious; great despondency. He has not the slightest recollection of anything relating to the accident, and does not even remember clearly anything that occurred on that day. Pupils equal, and act freely. Diet, meat, beef-tea, and milk. 16th.—Pulse 64, regular. Wound on head going on well; complains of headache; skin rather hot; pupils a little dilated, but act; tongue coated with a white fur; when tongue is protruded, it is seen to deviate a little to right of middle line; the angle of mouth on right side slightly drawn down; is unable to close right eye with the same firmness he does the left; sleeps well. 17th.—Pulse 78, sitting; bowels open; feels a giddiness and swimming in head, and weakness in legs when he attempts to walk. Memory: recollects only for a short time; is able to remember simple things; thinks he has seen persons to-day, when it was yesterday. Hearing about the same; states he was always a little deaf with right ear, but thinks it increased since the accident. Vision: everything is misty before him; with the exception of this, it does not appear to be affected. Countenance a little clearer, but

the peculiar melancholy expression is not altogether lost. Appetite pretty good; takes a little meat. Sleeps well now without an anodyne. Scalp wound progressing favourably. 23rd.—Patient still complains of headache and dimness of sight; states he sees things double; with exception of this, is much improved; wound on head nearly well.

Case 17.—*Injuries to the Head and Concussion of Brain—Inflammation of Cellular Tissue of Orbit.*

Alice H., aged 30. On admission was quite insensible; suffering from a great amount of collapse. On examination were found:—1. A wound extending from inner canthus of left eye down same side of nose to alæ, a little to left of median line; nasal bones exposed, but no fracture. 2. Severe contusion of left cheek; greatly swollen. 3. Ecchymosis of both eyelids. Wound brought together with three points of suture. Condition of pupil could not be ascertained, owing to the swollen state of both eyelids. Ordered: hot water-bottle and stimulants. Tuesday, September 3.—Patient remained totally insensible during greater portion of night, but towards morning was able to be roused; now lies in a very drowsy state, unconscious of things around, and when roused answers questions hastily, and then relapses into the same state. Complains of pain in head. Bowels open. Hair cut close, and iced water applied to head. 4th.—Much the same as yesterday. Swelling of cheek not diminished; ecchymosis of eyelids still as severe as on admission; pulse 88, quick, small, regular; tongue brown and dry. 5th. 9.30 a.m.—Pulse 100; respirations 39; bowels not open. Ordered: ℞ Hyd. chlorid gr. v.; ol. croton ♏½; ft. pil. statim; also, ℞ Hyd. chlorid gr. j.; antim. pot. tart. gr. ⅙; ft. pil. sextis hôris. 9 p.m.—Pulse 112; respiration 41; is more conscious, but still lies in a drowsy state, frequently sighing; skin cool. 6th, 9.30 a.m.—Had an attack of vomiting between six and seven last night. Complains of chilliness; very restless during night; slept but little; pulse 124; respiration 28; skin hot. Left cheek is much more swollen; skin is tense and shining, and presents an erythematous blush, which extends down corresponding side of neck to clavicle. There is also an erythematous blush about wound on nose. Head cooler; ordered to omit the medicine of yesterday, and to take the following: ℞ Mist. effervescens ℥j. sextis hôris. Left side of face and neck to be dusted with flour, and covered with cotton wool. Fomentations to left eye. 7.30 p.m.—Pulse 104; respiration 30; left side of face still more swollen; right side commencing to swell; tongue dry; bowels open. 7th, 10 a.m.—Pulse 108 sitting, laying down 92; seems more conscious; tongue moister and cleaner; swelling and redness of skin have subsided to a small extent; right pupil slightly contracted; there is a little more tension about left eyelids; the fluid which exudes when lids are separated is colourless and transparent; hitherto it has been purulent; the swelling is too great to permit of a thorough examination of eyeball; feeling through lid it *appears* to be collapsed. Ordered to omit mist. effervescens, and to take the following: ℞ Tinct. ferri sesquichlor. ♏xx.; aquæ ad ℥j.; ft. haust., ter die. 7.30 p.m.—Pulse 66; respirations 28; much the same. Ordered morph. hydrochlor. gr. ¼ nocte; and to be repeated if necessary during the night. Has taken some food to-day. 8th.—Pulse 84; skin cool; respirations left 19; tongue moist; pain in eye very great; the erythematous blush has disappeared; to discontinue the flour and cotton wool. 9th—pulse 94; respirations 28; still remains in a drowsy state, but restless at times; will not allow strapping or poultice to be applied to her face. 10 p.m.—Has been wandering; complains of pain in head; does not answer so well; left cheek rather more swollen; pulse 82; respirations 20; when asked to protrude tongue, does so very slowly, and as slowly withdraws it. 10th, 10 a.m.—Still wandering at intervals, and during these intervals lies in a drowsy state, frequently sighing; sleeps pretty well under influence of morphia (gr.¼) answers questions widely of the mark; pulse 84; on opening left eye-lid, the grey colour of iris is seen through cornea, which is slightly opaque and concave; the concavity may be only apparent, owing to the intense chemosis nearly concealing cornea; the conjunctiva was scarified at outer part. The true condition of eye-ball cannot be ascertained; face not so swollen; bowels not opened. 11th, 10 a.m.—Pulse 100, quicker; much the same as yesterday; left cheek is tense and swollen, matter evidently forming there. 9 p.m.—Distinct fluctuation in cheek (left), and on pressing it pus exudes from an opening near inner canthus; a small opening was made in lower part of cheek, and a great quantity of pus let out. 13th.—Pulse 94; complained yesterday and to-day of pain in head and left eye, says the latter is filled with boil-water, states she is able to see with it, but upon trying the eye, it is ascertained she cannot see at all with that eye. Swelling of cheek is decreasing; abscess discharging abundantly; is decidedly more rational and more conscious of her sufferings; slept pretty well during night, but not without an anodyne. 14th.—Pulse 90; tongue moist; skin cool; still complains of headache and pain in left eye; great intolerance of light; lies quite in a drowsy state; does not sigh so much. 16th.—Pulse 88; slept well during latter part of night; more pain about left eye; intolerance of light holds on; constant discharge of tears. The nasal duct seems occluded; bowels open. 17th.—Pulse 86; But little pain in left eye; can open lids to a small extent, and can distinguish a finger held at some distance; seems much more herself. 18th.—Had a slight rigor this morning, feels giddy and thirsty; feels cold, slight induration above abscess on cheek, probably another forming; pulse 118; skin dry; can open left eye-lids much better, so that with a little assistance the eyeball can be examined; chemosis has greatly subsided and the cornea can be distinctly seen; on outer and lower side of which a rough depressed spot about two lines across, with jagged edges, and an opacity about the size of a split pea. This opacity extends a short distance over the pupil. Wound of nose is progressing favourably; some portion of it has healed. 21st.—Patient much better; still a little puffiness about left cheek; wound discharges pretty freely; appetite improved; sleeps well.

THE LONDON HOSPITAL.

TWO CASES OF PLACENTA PRÆVIA, TREATED BY DR. BARNES' METHOD.

[Reported by Mr. W. B. Woodman, late Resident Accoucheur.]

I was called at 10 a.m. on August 31 last, to see Sarah B., aged 37, being told she was "in labour, and flooding tremendously." On my arrival, I found that she had last menstruated in the second week of December 1860, had had an attack of flooding at the end of March, but not very severe. She has been pregnant nine times previously, eight of which were natural labours, and one placenta prævia, attended by Dr. Down, who turned and delivered a dead fœtus. She stated that on Wednesday, August 28, (three days before) she had one or two pains about 10 a.m., when "the waters" escaped. She did not send for assistance, because the pains were so slight. On Thursday there was some hæmorrhage, and she sent for Mr. C., the gentleman to whom the case was allotted. He failed in diagnosing placenta prævia, and treated the case as one of accidental hæmorrhage, giving directions to be called again when the pains became stronger. She kept her bed all Friday, and there was hardly any flooding, but on Saturday morning, although the pains were slight and unfrequent, the hæmorrhage recurred violently, and I was summoned. On examination, I found the case one of complete placenta prævia. The os uteri was about the size of a florin. I introduced my hand into the vagina, and with the index finger loosened the placenta from the uterine surface, as high as I could reach, all round. With some difficulty, I could feel a free edge to the left, and a little posteriorly. The uterine parietes were thin, and the pelvis roomy, so that I could feel a head presenting through the walls of the uterus.

I waited about half-an-hour, and found that all hæmorrhage was checked. Having another patient to see, I left, with instructions to call me directly should flooding recur. There was no hæmorrhage, and I was not sent for, but went again at 12.15, and found the os uteri about the size of a five-shilling piece, soft, and dilatable. I therefore determined, if possible, to deliver at once for the sake of the child, although the mother had felt no movements since Wednesday. With some difficulty I made out that the child was presenting in the first position (Naegelè). I tried to turn with two fingers internally, and the other hand depressing the breech externally; by this means I converted it into a

transverse (belly) presentation, but could not feel the feet. I then introduced my hand, and seized the left knee, which I brought down, and succeeded in effecting delivery in about forty minutes from the first attempt. The child, a female of nearly average size, although wanting a fortnight to the full period, was dead, and decomposition had just commenced. The placenta followed naturally.

The mother has recoverd without any bad symptoms, except threatened mammary abscesses on both sides, to which I applied the extract of belladonna with glycerine, using no other means, with complete success.

On the same day, at 10 p.m., I was sent for to see Eleanor M., a pluripara, aged 38, of Bethnal-green. I found her drunk, and very violent; and was told that the liquor amnii had escaped a week before, but that there were hardly any pains, and only slight hæmorrhage. She sent two or three times for the gentleman appointed to the case, but insulted him so grossly that he declined to attend. On my arrival on the Saturday, I found her flooding slightly, but she refused to be examined, and threw herself about in the most violent way, being maddened with drink. I therefore left, with instructions to the nurse to keep her quiet; to put the gin bottle out of the way, to plug the vagina, and send for me if the flooding continued. I was not summoned till Sunday evening, September 1 last, at 9 p.m. She was then sober; had slight pains, but flooding profusely. Bedding, clothes, floor—all soaking with blood. I examined, and found complete placenta prævia, which I treated by loosening the placenta, as in the last case. The os uteri being rigid, although of the size of a crown-piece, and the patient being very unmanageable, even when sober, I determined to wait a little. All hæmorrhage ceased, but hardly any pains came on. At 11.30 p.m. the os uteri was more dilated and yielding. I found the head presenting as in the other case. I gave ʒij. pulv. ergotæ in ʒss. doses at twenty minutes' interval, but no pains followed. The woman was much exhausted, the pulse feeble, and rapidly rising. I gave her some wine, and proceeded to turn, seizing one knee (the left) with some difficulty, as the introduction of the hand brought on uterine contractions. However, I completed the delivery in thirty minutes. The child was a male, rather small, but perfectly formed. It was, as might be expected from the long time the waters had escaped, and the severe hæmorrhage, born dead. The woman menstruated last just before Christmas, 1860, but had no flooding till taken in labour. She has quite recovered. On the third day a little metro-peritonitis set in, treated by opiates and linseed poultices to the abdomen. Mammary abscesses threatened, but were treated successfully with the extract of belladonna freely applied all over the breasts.

Medical Times and Gazette.

SATURDAY, OCTOBER 19.

COLONIAL MIDWIFERY PRACTICE.

A LAMENTABLE CASE has just occurred at Grahamstown, involving an important question in Medical ethics. A poor woman was in labour; the midwife declared the case beyond her skill. Half-a-dozen Medical men were sent for, not one of whom would or could come till the patient was past all human help, and she died undelivered. Intense indignation has been excited in the public mind against the Profession; and what is worse, the Medical men concerned are busy in publishing *ex parte* and criminating statements against each other. The main facts are said to be these:—

A Mrs. Waters was taken in labour on Tuesday afternoon. The midwife came, pronounced the case a *cross birth*, and sent, first for Mr. Davies, then for Dr. Atherstone, the District Surgeon.

Dr. Atherstone says that he was, when sent for, at the point of starting to see a distant patient in *extreme danger*, to whom he had been *previously* called. "I therefore," he says, "at once declined to attend the case, but on the husband's urgent entreaty, consented to go down and see his wife whilst waiting for my carriage. The case was not a cross birth, as represented, nor was there at the time when I saw the poor woman (about half-past four p.m. on Tuesday) any occasion for surgical interference; had there been, I should certainly not have left without giving her what assistance was necessary. I was informed that she had had four children, all now alive, and that all her labours had been tedious. After explaining to the midwife (who had been in attendance two or three hours) the reasons why I feared this would be more than usually tedious (which I need not here detail), and perhaps might even ultimately require surgical assistance, I urged her to send again to Mr. Davies (for she had already sent for him previous to sending for me), or some other Medical man, if the poor woman was not delivered in half-an-hour; telling her that I was obliged to go to the country, and could not possibly be back before the next day. I then immediately left town, and proceeded to visit my patient. My carriage got upset in the dark in Howison's Poort, and myself and servant were violently thrown out, but fortunately escaped without any serious injury. I did not return to town until the following day, when I felt so ill that I was confined to my bed the whole day. Had I neglected my previous early engagement, and remained to take charge of the other, knowing as I did that there were five other civil practitioners and as many military in town, whose assistance might be obtained if required, I should indeed have been justly blameable."

So far Dr. Atherstone. Now let us hear Mr. Davies's statement—

"Mr. Waters came to me on Tuesday afternoon, asking me to come and see his wife. I told him I was just going to see a patient whom I had been attending for an injury, and could not then attend; but I said, 'There are other Doctors (naming Atherstone and Edmunds); I do not care about these cases; however, should you find neither of them at home, and return to me, if I am at home I will see your wife.' Thrice afterwards Mr. Waters came to my house, the last time about ten o'clock, accompanied by Mrs. Sparks. I did not see him, but the message left with my servant was, 'Mrs. Sparks and Mr. Waters called to say I must come down, and bring my instruments.' Half-an-hour after this I wrote to Mrs. Sparks, stating that I had no instruments, and desired her to procure other assistance. The next morning, at half-past eight o'clock, Mr. Waters came with a case of instruments, which he said Dr. Atherstone told him to bring to me, as I had none, and asked me to come to his wife at once, Dr. Atherstone not being able to attend, on account of an upset from his carriage. I asked Mr. Waters inside, looked at the instruments, told him he could return them to Dr. Atherstone, as they were of no use to me, and I would try and get a set from the Military Hospital, and come down immediately. On arriving at Mr. Waters' house, I found Mrs. Waters in a most dangerous state (this was twenty hours after labour had commenced). The case was then a cross-birth. I gave orders to administer wine and brandy freely, while I went to obtain the assistance of Dr. Tracey (a). On examination, Dr. Tracey agreed with me, that the case was a most dangerous one, and requiring immediate instrumental aid. We considered it advisable to obtain the opinion of Dr. Campbell before commencing any operation. We found Dr. Campbell in a quarter of an-hour; he at once accompanied us to the house, and coincided with us as to the dangerous state of the patient, and approved of the mode of treatment to be adopted."

We gather from the papers that Dr. Edmunds was sent for, when Mr. Atherstone left; and that he refused to come. He had attended this patient in a previous confinement, and was not engaged for the present occasion because the patient was dissatisfied with him. Dr. Leet, of the C. M. R., was next applied to, and received the messenger kindly; but regretted his inability to undertake such a case. Dr. Campbell, who was called in when the woman was dying, says,—

"I found the poor creature sinking fast, though the strongest stimulants had been administered. Drs. Davies and Stracy commenced instantly to remove the child, which must

(a) The name is written *Tracey* by Mr. Davies, and *Stracy* by Dr. Campbell.

have been dead at least twelve hours, but before they had fully succeeded, the patient sunk. Now, I do not hesitate stake my reputation as a Medical man with forty years practice, that, had Medical attendance been afforded at the time when the midwife sent for Dr. Atherstone, in all probability the patient might have been safely delivered in a few hours, and the motherless orphans blessed with their parent. I have never heard or read of so inhuman an act in the course of my forty years' practice; and, as it is proverbial throughout the world that Medical men are known to be more humane and charitable than any other class of individuals, I feel sure this is an exceptional case. If I could believe otherwise, I would throw my diploma into the fire, and turn leader to a wagon."

We cannot help lamenting the severe terms in which Dr. Campbell writes of his Professional brethren, and thus adds to the odium which the unfortunate occurrence has justly created. The affair was an unfortunate bungle from beginning to end. It was a *misadventure*. The poor woman began it by cashiering her Medical attendant, and engaging a midwife instead. Dr. Atherstone denies that the case was a cross-birth on Tuesday; although Mr. Davies says that it was on Wednesday. Why Dr. Campbell, or some of the other civil or military Practitioners were not earlier sent for, and why Mr. Davies did not go on Tuesday night, are matters which want explanation. But it is easy to collect the moral even from these imperfect and discordant statements.

We can fully understand the unwillingness of Medical Practitioners to be saddled with a laborious and unremunerated case of midwifery; yet, for all that, poor women must not be left to die undelivered. If the question be asked, Are men to be compelled against their will to neglect other business, to go at a moment's notice, and undertake a most laborious and painful duty, (and no one who does not practise midwifery has any notion of the horrors, the physical suffering and exhaustion, which a difficult craniotomy or turning case inflicts on the operator,) we say, they ought to consider themselves compelled, if by no law human or divine, at least by the lowest motives of expediency. It is in the highest degree inexpedient to let a patient die, and let an outcry be raised of inhumanity and neglect. Any Practitioner had far better put up with loss of time, and even with the annoying feeling that he is made the tool or slave of the most ignorant and ungrateful persons, than let it be said that two lives were sacrificed through his inhumanity. We all in this way are victimised in our turn, and it is far wiser to put up with it, as we do with the income-tax or any other inevitable extortion, than to be accused, however falsely, of neglecting a woman in labour. People will come and disturb our rest when we are most ill and fatigued, and when we are sure that we never shall receive even thanks for our trouble; but it cannot be helped. It is cheaper to go than to have a Coroner's inquest or a public outcry in the papers. If Dr. Edmunds had attended, and if he or Dr. Atherstone, who saw the poor woman early, had requested any one of his Medical brethren to come and share the responsibility; and had devoted an hour to turning (which we suppose was required) he might probably have had an irksome, an unpaid, and unthanked piece of hard work, and might have suffered some pecuniary loss; but most certainly he would have avoided all the scurrilities which are now cast upon his Profession by persons who probably would begrudge a shilling or a loaf to the poor, and yet expect us to give our very lives without fee or reward.

Yet it is not absolutely true that the unpaid labours of the Profession have no reward. Our Profession stands well in public estimation, and has a high character for humanity and disinterestedness. That character it is which raises the social position of every one of us. It was obtained by laborious and unpaid services; and must be maintained by the same. Each in our turn, then, when called on for a sacrifice of time and skill, may reflect that he receives his reward in the public estimation in which the whole body is held.

THE WEEK.

Lord Palmerston is never dull, and seldom says a foolish thing. His sayings, if they are occasionally a little one-sided, have a pungency and shrewd, common-sense character which often gives them a wide application. His Lordship was present the other day at the distribution of certificates to the successful candidates of the Oxford Middle-class Examinations, held at Southampton, and there gave utterance to the following observations on cramming:—

"There are objections which have been made to the system of competitive examination; some people say that it leads to a system of cramming. Now, it is often the case that when mankind seize upon a word they imagine that word to be an argument, and go about repeating it, thinking that they have arrived at some great and irresistible conclusion, and then they say that they think they have utterly discredited the system to which that word is by them applied. These men imagine that the human mind is like a bottle, and that when you have filled it with anything you pour that out again, and it remains as empty as it was before. But that is not the nature of the human mind, and the boy who has been crammed, as it has been said, has, in point of fact, learned a great deal, and that learning has accomplished two objects. It has, in the first place, exercised the faculties of the mind in being crammed; and, in the next place, there remains in the mind a great portion of the knowledge so acquired, which forms the basis probably of future attainment."

There is no Profession, in the preparation for which a system of cramming or grinding is more in use than in our own. The plea is, that the public teaching of the schools is insufficient. This arises partly from the fact that, however eminent a man may be who fills a Professorial chair, he may, unluckily, not have the knack of teaching, and partly from the unavoidable want of discipline in our Medical Schools and Colleges; partly, too, from the want of sufficient preparation in the mind of the learner. It has been calculated that at least three-fourths of the students who formerly passed the "College and Hall" were submitted to this process, and it is probable that the number is by no means lessened now that the Examining Boards are more numerous and the tests higher. Used in its proper place, there is no doubt that a system of private catechetical tuition has in it the elements of great good. It gives the pupil the art of arranging his thoughts in logical order, and clothing them in appropriate words. It gives him the power of answering questions neatly, and of making the most of what he knows at a *vivâ voce* examination. And the good thus gained is lasting. But the process is not without faults and abuses. Much of the knowledge, so called, is merely verbal, and utterly unreal. So men learn by heart a string of chemical tests, or the origins and insertions of muscles, without having worked in the laboratory or dissecting-room. So, too, they "get up" a list of dates and dynasties, and fancy they have a knowledge of history. Cramming is noxious, too, when the subjects are got up merely for an examination; and are discarded immediately, and form no part of the knowledge available in after life. Some cramming, too, is open to the charge of trickiness; it merely teaches the student how to flatter the vanity of individual crotchety examiners, and to give the "answers they expect." This was the objectionable feature of the old grinding for the College and Hall. With these exceptions, and with the further limitation that it should be resorted to not so much as a means of teaching, as of enabling a man already taught to sift and test his deficiencies, and to show fairly what he knows,—we think cramming a process that improves the mental calibre of all but the best men. If men who are

stuffed with a mere smattering continue to pass Examinations, the Examiners ought to be plucked for incompetency.

The Rev. H. Moule, of Dorchester, has advocated a scheme for the disposal of sewage manure, which deserves commendation for its simplicity, its naturalness, and we believe its efficiency likewise; and it is not the least praiseworthy part of Mr. Moule's labours that he teaches constantly that in dealing properly with human manure you not only relieve towns and villages from a physical source of disease and death, but that you create positive health and plenty in their stead. Mr. Moule's plan for deodorising manure is simple admixture with earth. In a paper on "The Application of Garden Culture, combined with a System of Earth Sewage, to the Support of Day-schools," read before the "Southern Counties' Adult Education Society," he says:—

"The deodorising power of soils, and their capability for the retention of manure, are such—provided the substance to be deodorised be dealt with at once and in detail, and if the evil be not allowed to fester for months, days, or even for hours—that a very small quantity of earth is sufficient for the purpose. Further, I have discovered that, if dried by the sun, or by moderate fire heat, the earth thus mixed and deodorised retains the full value of the manure. And, still further, that it can be dried and used again and again for the same purpose, increasing each time, of course, the value of the manure."

He then goes on to show the enormous productiveness of land manured with this substance, and proposes the establishment of working schools for country boys, the chief feature of which shall be spade cultivation by the aid of this manure, and production of garden produce. Villages will be relieved of a great source of nuisance; children will have the advantage of protracted moral and industrial training at school (including the Chadwickian proportion of three hours' lessons to four play and seven work), and garden produce would be increased. The inhabitants of towns who pay 1s. 8d. per pound for fresh butter, and to whom fresh fruit and good preserves are very costly—almost luxuries, will be inclined to look with favour on Mr. Moule's scheme:—

"We are at present dependent on France and other countries, and still more on adulteration, for preserves. Open a new branch of industry. An acre of red currants, for instance, grown as espaliers, four feet asunder, and well manured, shall in a year or two produce £50 a-year. Some of the pupils of your girls' school shall pick this produce, and, if necessary, preserve it. The space between the rows will afford room for carrots, turnips, or onions, that may give you a crop worth from £10 to £30. Let half of your land at least, then, be devoted to these common fruits, and I feel confident that my general estimate will prove far lower than it might fairly be made."

At a meeting of the same Society, at Dorchester, Mr. T. H. Bastard, a well-known promoter of the physical and moral welfare of the people, read a paper, in which he states that the education of the working classes does not give them the power or inclination to avail themselves of Reading-rooms and Mechanics' Institutions, and recommends popular lessons in physiology as a part of school teaching:—

"What is of greater importance to a poor man than his health? and yet what instruction is given respecting the structure of that complicated machine, his body, on the use or abuse of which his good or bad health depends. Again; the welfare of the poor depends on their industry and economy, and on the sale of their labour for wages; but what instruction do they receive at school on these matters, or on that all-important one, prudence in marriage? I contend that, instead of so much school time being devoted, as at present, to learning impressions and traditions, we want to have taught more constitutional knowledge of ourselves—more knowledge of Nature, of her works, and the supremacy of her laws—and more knowledge of and training in those things and acts, on the understanding and due or undue performance of which depend thriftiness and unthriftiness, honesty and dishonesty, conduct and character, and happiness and misery."

The entire passage from Sir E. Lytton Bulwer's "Strange Story," which we commented on last week, is this:—

"To all animate bodies, however various, there must be one principle in common—the vital principle itself. What if there be one certain means of recruiting that principle? and what if that secret can be discovered?"

"Pshaw! The old illusion of the mediæval empirics."

"Not so. But the mediæval empirics were great discoverers. You sneer at Van Helmont, who sought, in water, the principle of all things; but Van Helmont discovered in his search those invisible bodies called gases. Now, the principle of life must be certainly ascribed to a gas (a). And whatever is a gas, chemistry should not despair of producing!"

And the text of Baron Liebig's work, which is so strangely misquoted, is this:—

He is treating of the nature of contagion, and developing the well-known zymotic theory; which supposes the communication of a peculiar state of change or decomposition from one body to another. He deprecates the theory which ascribes life to contagious matter, and shows that, however true figuratively, it is not true in fact. "Our notion of life," he argues, "involves something more than mere reproduction—namely, the idea of an active power exercised by *virtue of a definite form*, and production and generation in a definite form." Chemistry may combine the constituent elements of organized tissues, but cannot produce the form. But contagious miasms have no form. They may even be aëriform, which excludes the possibility of their having life or form. "Several kinds of contagion are propagated through the air; so that, according to the view already mentioned, we must ascribe life to a gas, that is, to an aëriform body. All the supposed proofs of the vitality of contagions are merely ideas and figurative representations, fitted to render the phenomena more easy of apprehension by our senses without explaining them. These figurative expressions, with which we are so willingly and easily satisfied in all sciences, are the foes of all enquiries into the mysteries of nature." "It is certain that the action of contagions is the result of a peculiar influence dependent on chemical forces, and in no way connected with the vital principle." "An animal substance in the act of decomposition, or a substance generated from the component parts of a living body by disease, communicates its own condition to all parts of the system capable of entering into the same state, if no cause exist in these parts by which the change is counteracted or destroyed."—*Liebig's Chemistry of Agrieulture*, etc., by Lyon Playfair, London, 1842, p. 381. How any one could venture to quote from Professor Liebig in order to prove that a gas is alive, or is the principle of life, is strange.

Dr. Gibbon, the Medical Officer of Health for Holborn, in a late Report to the Board of Works, gives the following description of some of the dwellings in his district. Is it fair, we ask, to the rest of the community, that dwellings should be built, or be allowed to remain, which must render the occupants a burden on the rest of the community?

"A labourer's wife, aged 36, died in child-bed, when, according to the verdict of the Coroner's jury, 'the midwife was culpable;' it appears that the removal of the after-birth was not properly effected, and that in the absence of competent Medical assistance the poor woman was allowed to bleed to death.

(a) "According to the views we have mentioned, we must ascribe life to a gas, that is, to an aëriform body."—Liebig, "Organic Chemistry," Playfair's translation, p. 363.

I have carefully examined the house (55, Eagle-street) where this death, as well as three from scarlet-fever, occurred. Its sanitary arrangements are as bad as they well could be, the back yard, which was intended to afford light and air to the inmates, has most improperly been converted into a cow-shed. This shed is badly ventilated, no water is laid on to the premises, the only supply is drawn from a surface well, situated almost immediately under the cow-shed, and the inhabitants have to go to a pump in the cow-shed for it. There is, besides, an offensive closet, without water supply, under the staircase of the house.

"A Fever Shell.—My attention has been called to a large, old, flat-bottomed sewer, which runs through the basement on a level with the floor of No. 10, Charterhouse-square. This sewer carries off the drainage of the large and thickly-peopled yard, known as Black Horse-yard, Aldersgate-street. It is a source of great annoyance and nuisance to the inmates, it renders the basement damp, besides a constant leakage of sewer gases through the porous brick-work; every now and then, I am told, the rats make their way through it, when the inmates are half-poisoned by the stench. The houses, Nos. 9 and 10, are inhabited by a large number of young women, *employés* of Messrs. Copestake, Moore, and Crampton, the large Warehousemen in Cheapside. These young ladies are of an age which is peculiarly susceptible of low-fever. At present their health and lives are in jeopardy, sleeping as they do over a fever shell, which is liable to explode at any moment."

The *Daily Telegraph* gives an account of a curious affiliation case at Windsor. A girl swore that she became pregnant by a respectable solicitor, who was with her in a cab, and gave her some "scent" which made her insensible, by passing a handkerchief across her face; and that connexion occurred during insensibility. The magistrates did not believe her, nor do we.

The power of suffering in silence is that one virtue which gives something like a grandeur to the character of the English peasant—rude, coarse, unimaginative, and lumpy as he may seem in general. No one is better qualified to give testimony to this than Miss Nightingale. In a recently-published letter she says:—

"The simple courage, the enduring patience, the good sense, the strength to suffer in silence—what nation shows more of this in war than is shown by our commonest soldier? I have seen men dying of dysentery, but scorning to report themselves sick, lest they should thereby throw more labour on their comrades, go down to the trenches and make the trenches their death-bed. There is nothing in history to compare with it. Other nations may do it for glory, but we for duty, as the Duke of Wellington said. I say no one has seen the horrors of war as I have, yet I was glad to see the spirit of war arising in our volunteers. Say what men will, there is something more truly Christian in the man who gives his time, his strength, his life if need be, for something not himself—whether he call it his Queen, his country, or his colours—than in all the asceticism, fasts, and humiliations that have ever been made. And this spirit of giving one's life, without calling it a sacrifice, is found nowhere so truly as in England."

Doomed and decaying as the North American Indians are, it is interesting to find that a specimen of the race possesses great physical development, and defeats the best runners of the Old World. "Deerfoot" is described in the sporting columns of the *Star* as a genuine North American (or copper-coloured) Indian, with a skin as bright as "polished pine." He stands 5ft. 11½in., and weighs about 11st. 6lb. "He runs rather flat-footed, except when spurting; but his usual stride appears with his legs to be gliding, his shoulders moving slightly at each motion, his neck being very stiff, which gives his head the appearance of rolling from side to side. He is one of the finest specimens of the American Indian that has appeared in England, being much above the usual height, with the dorsal muscles so fully developed that while running he appears to be round-shouldered, the muscles in the lumbar regions being equally well matched with the former. His thighs are a mass of muscles, while his lower extremities are rather light in appearance, but without an ounce of superfluous flesh on his calves. His chest is thoroughly developed, the pectorals being larger than in most British 'peds,' and the biceps and forearms show a power which could be little expected from a son of the prairies. His frontispiece is characteristic of his pedigree—the steady, full dark eye, with malar bones fully developed, and the lower maxillary full, but receding. His hair is of the usual horse-hair texture, but rather long." He has beaten Jackson, the "American Stag" (an Englishman, nevertheless), who had beaten all the world before; and ran four miles on Monday, at Brompton, in twenty-one minutes one second and three-tenths. Dr. Hodgkin inserts a kindly caution in the papers, and expresses a hope that this poor fellow may not be the tool of persons who sport with him and make money by his prowess, then desert him, destitute, and let him fare as he can.

Our attention has been called to the frequency with which alterations are made in the laws of that very excellent Institution, the "Society for the Relief of Widows and Orphans of Medical Men in London and its Vicinity." At present it is proposed to extend the area of the Society's operations, beyond the old limits—a radius of seven miles from the General Post-office—to the whole London Postal District. The next Half-yearly General Meeting will be held on the 23rd inst.

Mr. Sotheron Estcourt gave some very good advice last week to the members of the North Somerset Friendly Society. "The working years of a man's life," he said, "were from 15 to 65, or fifty years. Now, it was found that the amount of sickness, which, upon an average, a man ought to be prepared for in the first half of that period—namely, between 15 and 40—was almost invariably half-a-year, or 185 days; and between 40 and 65, one whole year."

The little Princess, Donna Maria de la Concepçion, daughter of the Queen of Spain, has been attacked by convulsions, and her mother called in Homœopathic Physicians; whereupon Dr. Corral, the Queen's Chief Physician, and Dr. Drumont, the second, at once resigned their offices.

Mr. Benjamin Vale (L.S.A., 1839), of Bethnal-green, and William Garrett, of 9, Coventry-street, Three Colt-lane, have been committed to Newgate on a charge of wilful murder, found against them by a coroner's jury. The victim was Garrett's wife, a woman aged 34, on whom it was alleged that an operation for procuring abortion criminally had been performed by Mr. Vale. The facts of the case are anything but positive in the newspaper account. Dr. Corner deposed that there were "three indistinct marks on the mouth of the womb, which might have been the result of puncture;" and the "exciting cause of inflammation was most likely from such punctures, in the absence of any other known cause." This is not enough to convict a man of murder.

The malicious libel referred to last week at page 384 having been again brought before the attention of the Profession in this week's number of the periodical in which it was first published, it may interest our readers to know that an action has been commenced against Mr. William Webber,

late of Norwich, the author of the libel. As the whole facts of the case will be brought before the Profession in due time, it is only necessary for us now to repeat our statement, that the charges are entirely false.

UNIVERSITY OF ST. ANDREWS.

MEDICAL EXAMINATION PAPERS.—September 1861.

First Examination.

FIRST PART.

A Latin paragraph to be translated into English.

Give the derivations or primary meanings of the following words :—Anencephalous, botany, epiphytes, phimosis, prognathous, prognosis, pylorus, and skeleton.

SECOND PART.

CHEMISTRY.

1. What are the compounds of arsenic and oxygen? Describe the tests for these.

2. What are the general characters of acids? Enumerate some of the ordinary acids, stating their composition.

3. Give the formulæ expressing the composition of the following salts :—Cream of tartar, prussiate of potash, sugar of lead, and oxalate of lime.

THIRD PART.

MATERIA MEDICA AND THERAPEUTICS.

1. What preparations of antimony occur in the Pharmacopœia? How are they prepared? Describe their leading physical and chemical characters, and their various uses in the treatment of diseases. What are the symptoms of poisoning by tartarised antimony, and how would you search for the presence of this salt in the urine?

2. What preparations of zinc are employed in Medicine, and what are their principal medicinal uses?

3. Describe the actions of the medicines known as narcotics What are their most important uses? Indicate any points in which the principal narcotics differ from one another in their action.

4. Write a Latin prescription or prescriptions, without symbols or abbreviations, for a case of acute gout occurring in a vigorous middle-aged man; also for a case of acute articular rheumatism, the heart's sounds being unaffected.

Second Examination.

ANATOMY AND PHYSIOLOGY.

1. Describe the course and relations of the femoral artery.

2. The anterior walls of the right auricle and right ventricle of the heart being removed, describe fully the parts brought into view.

3. Describe the distribution and functions of the nerves in the orbit.

4. Describe the uterus and its contents at the middle of the third, sixth, and ninth month of pregnancy. What is the shortest period of pregnancy compatible with the viability of the fœtus? What is the longest period in which a living child may be borne *in utero?* What is the average period of gestation?

Third Examination.

N.B. In answering the practical questions, the Examiners require every Candidate to specify the mode of treatment which he is in the habit of adopting, and the doses of the medicines which he prescribes.

PRACTICE OF MEDICINE.

1. Name the principal diseases characterised by spasm or paralysis of the voluntary muscles, and give such a short account of each as to show your acquaintance with its distinguishing characters.

2. Describe and contrast the treatment of (*a*) asthma, (*b*) chronic bronchitis with emphysema, and (*c*) phthisis pulmonalis, in so far as concerns the chest. What are the leading pathological and symptomatic differences to be kept in view as regulating treatment?

3. Give details of the various circumstances under which the following signs occur :—viz., prolonged expiration, bronchophony, amphoric breathing, metallic tinkling, pectoriloquy, jerking respiration, fine and coarse crepitation.

4. Describe the indications for and against the performance of paracentesis in pleuritic effusion; also the leading dangers of the operation, and the precautions to be taken to avoid them.

5. A man of about fifty years of age has had several attacks of dropsy of the limbs and face coming on after cold; during which attacks the urine has been scanty, but in the intervals abundant. After a considerable period the general strength begins to fail; the muscles are flabby, the complexion remarkably anæmic, the urine still abundant. There is no longer dropsy, except a very little persistent swelling of the ankles at night. In the end the eyesight fails, there is occasional dizziness and one or two slight attacks of insensibility; the urine becomes diminished in quantity, and diarrhœa occurs; in the midst of this complication of symptoms the tongue dries, the urine becomes almost suppressed, and without any administration of narcotics, the patient sinks into coma, and dies. Fill up the particulars that you may imagine to be wanting in the history of this case, and remark upon its pathology, diagnosis, and treatment.

Fourth Examination.

SURGERY.

1. Describe the diseased conditions to which the coats of arteries are liable, and how these may influence, at the time of the operation or afterwards, the changes which result from the application of a ligature.

2. Describe the symptoms and treatment of the various fractures and dislocations of the radius.

3. Describe the methods of treatment in cases of obstruction of the lachrymo-nasal duct.

4. A patient has received a severe blow upon the head, and is insensible. From what conditions might this arise, and what other symptoms would you look for in order to enable you to form a diagnosis of the nature of the injury?

Fifth Examination.

MIDWIFERY.

1. What are the symptoms of pelvic cellulitis, the circumstances in which it is apt to occur, and the usual results; and how ought the disease to be treated?

2. Enumerate the principal causes of hæmorrhage from the unimpregnated uterus, stating the treatment appropriate to each.

3. Give an estimate of the value of the ergot of rye in midwifery, mentioning the indications for and against its employment in different cases.

4. State the causes, symptoms, and treatment of collapse of the lung in infants.

5. An unmarried woman, aged about 21, had for some months menstruated irregularly; and latterly a bloody vaginal discharge had lasted for some time. As this ceased she began to complain of pelvic uneasiness and bearing down feelings, with difficulty in micturition and defecation, but without any violent attacks of pain, or of fever. In about a month a somewhat irregular swelling, tender to the touch, had formed in the iliac and hypogastric regions; and on examination per vaginam a firm, obscurely fluctuating tumour of considerable size was felt behind the uterus, the neck of which, however, was unaltered, and its cavity as measured by the sound, not enlarged. There was neither thickening nor induration of the walls of the vagina. When the tumour was punctured with a needle through the vagina, only a little blood escaped. What was the nature of the disease, and the result of the case?

FOREIGN CORRESPONDENCE.

GERMANY.

Berlin, September 30.

ON FERMENTATION IN THE STOMACH.

Some time ago I sent you an account of the clinical experience of Professor Henoch with creosote in obstinate vomiting due to fermentation, and I to-day follow up that communication by giving you the views entertained by Professor Frerichs on this disease, which was first observed by Beaumont and Goodwin; and several cases of which have been since collected by Dr. Budd, in his treatise on the Organic Diseases and Functional Disorders of the Stomach. Professor Frerichs' views on the subject were embodied in a paper,

read some time ago at the Medical Society of this place, by Dr. Mannkopf.

In the ordinary process of fermentation, the decomposition of sugar into alcohol and carbonic acid is brought about by yeast; and the alcohol is afterwards further oxidised and changed into acetic acid. Yeast retains its power of fermenting so long as there are albuminous matters with which it may come in contact. If these are wanting, it loses its specific powers after some time, just as is the case with diastase and saliva. All these then become similar to bodies containing azote and sulphur, and after having reached a certain stage of decomposition, they transform sugar into lactic acid, during which process no gas is set free, as carbonic acid and water are only evolved if the lactic acid is changed into butyric acid. Similar processes may take place in the stomach. If albuminous matter becomes putrid, sulphuretted hydrogen is evolved, which distends the stomach and causes the troublesome and putrid eructations. Besides these, there may be alcoholic and butyric fermentations, during which gases are set free, and also lactic fermentation, which last occurs more frequently, and is not accompanied with a development of gas. The ructus which are caused by alcoholic fermentation consist of carbonic acid, which is free from smell; and in this case there is only an acid taste caused by the acetic acid, which is the final production of the chemical changes. But butyric acid being volatile, the gases of which the eructations in this case consist are exceedingly unpleasant and pungent, both to the smell as well as to the taste. The froth which covers the vomited matter, and its smell, have to lead us in the diagnosis of these pathological conditions.

Such abnormal fermentation may be caused in the following manner:—Azotic and non-azotic matter which is capable of fermenting is continually ingested, and yeast-fungi are often taken with bad beer and bread; but these are not sufficient in themselves for causing fermentation in the stomach. Yeast has been recommended for scurvy, and has been administered in that disease by ounces, without ever causing fermentation. It is therefore necessary that, besides the yeast and the matter capable of fermenting, there should be a special condition of the stomach favourable to fermentation. The yeast must have the time and opportunity for developing itself; under ordinary circumstances it is rapidly removed from the stomach, and the sugar is also so rapidly absorbed that the fermentation has no time to commence. Thus the removal of the fluid by the walls of the stomach, and the pylorus must in some way or other be impeded if fermentation is to take place; such is the case in chronic catarrh of the stomach, when the swelled mucous membrane is covered with a thick layer of mucus; also if the peristaltic movements of the stomach are deficient, and if the pylorus is stenosed by stricture, ulceration, or neoplasms; in this case the stomach is secondarily dilated, and thus the chymus remains longer in it than usual. The yeast-fungi are then allowed to develope in considerable quantities; the albuminous matter becomes decomposed so as to act as yeast, and the sugar which is enclosed in the chymus and not absorbed through the walls of the stomach becomes further decomposed.

Another cause may be the anomalous condition of the gastric juice. If much acid is present, lactic fermentation cannot take place; if therefore the gastric juice is in its normal acid state, the anomalous metamorphosis of non-azotic matter is prevented, while alcoholic fermentation and the further development of the yeast-fungi are favoured by a certain amount of acid. Too much stress has been laid on sarcine as a cause of dyspepsia; according to Professors Virchow and Frerichs it has nothing to do with this or any other form of indigestion.

From the foregoing we may conclude, that the disease is not cured, even if we have succeeded in curing the fermentation. This latter is always connected with other morbid conditions of the stomach, which also require treatment, although the most troublesome symptoms, viz., distension of the stomach, eructation and vomiting, are certainly got rid of if the fermentation is suppressed.

The question whether creosote has the power of suppressing all processes of fermentation, has not yet been settled; but it is certain that this remedy can do away with that kind of fermentation, in which alcohol, acetic acid and carbonic acid are formed. Several cases of this kind have recently occurred in the clinique of Professor Frerichs, and I will give you the particulars of one of them, as it was an unusually severe case. The patient was a working man, aged twenty-five, who had suffered from ulcer of the stomach for three years; he was so worn out by continual vomiting that when he was brought into the Hospital he could scarcely move. On examination a considerable dilatation of the stomach was found, most probably caused by stenosis of the pylorus in consequence of the cicatrisation of the ulcer, which latter was, according to Professor Frerichs' opinion, healed. The vomited matter contained a greenish yellow liquid, of acid taste and smell. The severe pain in the dilated stomach, which was especially felt at the pylorus and the cardia, was mitigated by the administration of the extract of belladonna, after which the pain was only complained of at intervals, especially after a meal, when the stomach endeavoured to overcome the impediments offered by the pylorus, by very strong peristaltic movements, which could be well distinguished through the thin abdominal parietes. The vomiting also became less frequent, although it was soon necessary, in consequence of the constitutional effects of belladonna having come on, to discontinue the medicine; whereupon the patient soon relapsed into his former condition, and acetate of morphia only procured temporary relief. The general health of the patient now became rapidly worse, the pulse was scarcely to be felt, and the temperature decreased to 75·5° F. As the vomited matter was found to become covered with brown froth after having stood for some time, and yeast fungi were contained in it, creosote in pills was administered (½ gtt. per diem). After this the vomiting ceased, and only returned once, when the patient had committed a fault in the diet; but on this occasion the matter vomited did not show any signs of fermentation. The patient's strength now rapidly increased, and he was discharged after a few weeks, as well as could be expected.

At the same meeting of the Society, a curious case was related by Dr. Güterbock, which, if the *Medical Times and Gazette* is perused by the Hygeists of the "British College of Health," will no doubt raise a triumphal shout from that industrious body. A newly-born infant, which was found to weigh eight pounds immediately after birth, was on the tenth day seized with uncontrollable vomiting, by which it was so reduced, that at the end of two months it looked more like a skeleton than anything else, and weighed only three pounds. As the condition of the little patient did not improve, in spite of the most efficient remedies, among which were creosote and pepsine, the relatives, clandestinely, gave it a few of Morison's pills, and after a month, the child, which had been costive, had become considerably better. This interesting fact was then communicated to the Medical attendant. Professor Schönlein, who was then called in, ordered, instead of the pills, extra. rhei. and wine, and after six months the child again weighed nine pounds, and is now quite well. This case is almost worth another lion in the Euston-road.

Hamburg, September 17.

THE PUBLIC HEALTH.

The summer which is just passed has not been remarkable here for any extraordinary pathological occurrences, there having been but a few cases of the usual diseases. A very considerable epidemic of small-pox, which lasted for nearly two years, ceased at the end of the winter; but, as in almost all large towns, sporadic cases still occur. The cases of typhoid fever, which never entirely leaves us, have also been few. Cholera, I am thankful to say, has not up to the present time made its appearance, although a few Practitioners have scented danger in some cases of summer diarrhœa accompanied by vomiting which occurred in August. Pleurisy has, however, been unusually prevalent, evidently in consequence of the frequent and sudden changes of the weather and in the temperature. At times the thermometer ranged from 81—88° F., with sultry and oppressive air, and then suddenly fell again to 54—59° F., with cutting north and north easterly winds. The number of patients, as well as the mortality, decreased at the commencement of autumn, so that the absence of many of our busiest Practitioners, who have gone abroad in order to gather fresh force for the winter's campaign, is scarcely felt.

SUICIDES.

It almost seems as if human folly desired to fill up the gaps left by Providence in the lists of mortality. The

number of suicides has been exceedingly great lately. In August a day seldom passed without the newspapers reporting the finding of one or more dead bodies in some one of the numerous waters in the town or its vicinity, and in almost every case the circumstantial evidence went to prove that these persons had met death by their own hands. Almost all of them were servants or labourers. It is very difficult to explain why suicides should be so frequent here; it is true that the lower classes are very much addicted to drinking, but they are even more so in other towns of Northern Germany, where self-destruction is of comparatively rare occurrence. The wages paid here are very good, and private as well as public benevolence is never chary in cases of real (and even feigned) distress. The mortality of the lower classes, considering the circumstances, is of a very fair average, and their physique is much superior to that of the inhabitants of other large towns. This is in a great measure due to the continual influx of immigrants from the neighbouring Holstein, than whom, perhaps, no other country can show more powerful and vigorous constitutions. In short, nothing remains to us but to acknowledge our ignorance in this difficult question, with the standing phrase, that the increase of suicides is due to the advancement of civilisation. Perhaps one cause of this sad tendency here, is the sudden transition from country to town life, by which people belonging to the lower classes are bewildered. They are often affected by home-sickness and melancholia which not unfrequently ends in insanity.

FATTY DEGENERATION OF THE LIVER IN PHOSPHORUS POISONING.

The number of poisonings by phosphorus have very much increased here of late, no doubt in consequence of the ease with which it may be obtained, a common box of lucifers containing a sufficient amount of poison for killing at least one person. No less than six suicides by phosphorus have occurred here this summer, of which, however, only three were successful. In no one of these cases did the death result from severe gastritis and enteritis; but slight icterus, and a number of nervous symptoms, amongst which oppression in the præcordium, vertigo, and a feeling of great weakness, were observed. Dr. Hellbert, our Gerichtsarzt, who made the post-mortem examination in the first of these cases, noticed considerable fatty metamorphosis of the liver, which was almost converted into detritus. He communicated this fact to the Medical Society of this place, and said he believed in a peculiar connexion of the general nervous symptoms which had preceded death with this acute degeneration of the liver. Two other cases, which were observed in the lunatic asylum and the Medical wards of the Hospital, soon afterwards showed the same combination of symptoms during life, and structural changes in the liver evidenced by the autopsy. With the exception of slight vomiting of a greenish matter in the commencement, there was scarcely another striking symptom indicating an affection of the bowels. On the second day there was great weakness, oppression, and vertigo; on the third day death ensued, preceded by great collapsus. In both cases the liver was turgescent, yellow-reddish, marmorated, and on the cut appeared dirty and fatty. The microscopic examination of the acini showed that they were filled with a large quantity of fat, were partly devoid of their normal structure, and destroyed. Dr. Tüngel believed that these cases were similar to those which are designated icterus gravis, and the causes of which are, no doubt, very various. A real connexion between fatty liver and poisoning by phosphorus has quite recently been rendered probable by the experiments of Dr. Lewin, of Berlin, on dogs and rabbits.

INTERMITTENT PNEUMONIA.

The neighbourhood of this place is, as are all marshy territories, regularly attacked by more or less violent epidemics of intermittent fever every spring and autumn. Ague often takes the form of hyperæsthesia of a certain nerve, or of a general affection of the nervous system; but it is rare that actual pneumonia, with a characteristic course, is caused by paludial miasma. In Wandsbeck, about two miles from here, in a territory in which ague generally prevails in the spring, some time ago, a boy was suddenly seized with rigors, severe shooting pains in the chest, and rusty expectoration. Dr. Schwarz, the Medical attendant, found the physical signs of infiltration of the inferior lobe of the right lung, and prescribed as for a case of common acute pneumonia. On the following day the fever, expectoration, and the shooting pains were quite gone, and the infiltration was also sensibly diminished. The Doctor assumed an extraordinarily favourable course of this disease, when, on the third day, the shooting pains and the fever returned with greater violence than on the first day, and the infiltration had also very much extended beyond the space it had occupied at first. Quinine in large doses was now at once administered, and a short time before the third fit would probably have taken place, another large dose was given, which prevented the fit; the infiltration also rapidly softened. Soon afterwards other similar cases came under the care of Dr. Schwarz, which he also treated with quinine, and with the same favourable results, so that their nature cannot be doubtful.

ON PACCHIONIAN GRANULATIONS.

Dr. Meyer, the Physician to our Lunatic Asylum, has for some years past made a great number of observations on Pacchionian granulations, which were formerly believed to be utterly irrelevant formations, but are now shown to be interesting not only in a physiological but also in a pathological point of view. They are not confined to the neighbourhood of the sinus longitudinalis superior, as was hitherto assumed, but they are also found (especially in the insane) in other parts, particularly along the free edge of the cerebellum on the vermis superior, on the base of the cerebrum on the temporal lobe, on the terminal part of the posterior lobe, and in the fossa Sylvii. This frequent occurrence along the large venous canals of the dura mater, shows an evident connexion of the origin of the Pacchionian granulations with considerable disturbances of circulation in the head. Dr. Meyer is of opinion that rapidly occurring hyperæmia or anæmia of the cerebrum which take place in the insane, and have been experimentally produced in animals by Professor Kussmaul for causing epileptic convulsions, are impossible without corresponding changes of the dura mater; for as the quantity of the blood cannot change its position so rapidly in the skull, which is closed air-tight, we have in anæmia of the brain a displacement of the blood towards the periphery of the internal skull; the large sinuses and veins of the dura mater swell and thus fill up the vacuum caused by the collapse of the anæmic cerebrum; and the reverse is observed if hyperæmia of the brain exists. Such conditions are impossible without a pulling and dragging of the parts, and thus the villi of the arachnoidea are produced. In the middle fossæ of the skull they sometimes become just as strongly developed as along the sulcus longitudinalis, and may then cause injury to the trigeminal nerve. Two such cases have been recently observed by Dr. Meyer. In one of them severe neuralgia of all branches of the fifth pair of both sides existed together with such disturbances in the nutrition of the eyeball as are observed after a division of the nerves within the cavity of the skull, viz., inflammation and suppuration in the anterior camera.

ITALY.

Florence, September 30.

PUBLIC HYGIENE.

The system of sanitary administration which is in force at the present time in Tuscany is not likely to long outlive the old *régime* which created it. Not that the written laws, as such, are very bad or defective. Even in her worst days Italy never lacked laws and law-givers; but the people very naturally ignored the fiats and vetos of self-constituted authorities, and the latter, although despotic and tyrannical, had not sufficient courage to enforce respect and obedience to them. This habitual disregard for laws in general, which can only be gradually supplanted by the better habits of self-government, is most particularly mischievous in matters of sanitary police and public hygiene. Whatever the worth of existing regulations may be, they might as well not exist for the influence they have upon such matters. In 1855, when cholera was decimating the population of Florence, the authorities, roused into a fretful activity, made a sudden inroad on the sanctums of domestic life, somewhat summarily enforcing cleanliness, ventilation, whitewashing, and other measures of urgent necessity. It must be granted that some valuable innovations date from that time; but after all they were only accidental and local, and as yet nothing betrays the

steadier working of general legislation. If sanitary reform is to be carried out on a larger scale, the first step in the right direction ought to be the establishment of something like a system of registration. As diagnosis should precede treatment, so the evils which public hygiene is expected to combat or to prevent should first be clearly set forth by numerical eloquence; but neither here nor in any other part of the kingdom is the income and expenditure of life computed or reasoned upon. Births, marriages, and deaths are chiefly viewed in a sacramental character, and the Church is the only body that takes cognisance of them, while other important matters, such as pathological statistics, are entirely neglected. I am not acquainted with the provisions of the Tuscan poor-laws, but, whatever they may enact, dispensing Physicians and district dispensaries do not exist either in Florence or in any other town of Tuscany. If a few boroughs form a laudable exception to this rule, it is owing to a more enlightened and liberal disposition of their municipalities than to any provisions of the law. These few privileged communities have a so-called *Medico-condotto*, who is appointed and paid by the Mayor, if a pittance of 500 or 1000 francs per annum can be called payment for the harrassing duties of an obligatory practice, extending sometimes over several villages and more or less mountainous and roadless districts. Besides this *Medico-condotto* (and *à fortiori* in places without a *Medico-condotto*), there is always the *flebotomo*, as the Italians spell it, or licensed venesector. This person is by no means to be despised, for he has had his two years' Professional training, and thoroughly understands his business. The flebotomo is also a Dentist, and if he likes he may add veterinary Surgery to his practice, but he is not allowed to overstep the limits of the *bassa chirurgia*. Nevertheless, he rarely resists the temptation to poach on the higher domains of his colleagues, nor have the latter any interest in checking him; and where there is no *Medico-condotto*, that is to say in the majority of boroughs and villages, the flebotomo is king among the blind, and would be thought silly if he refused to take upon himself the combined duties of Surgeon, Physician, and Apothecary for man and beast. By far the greater part of these places are without a midwife, and the pharmacy is often in the hands of the grocer or of some amateur herb-gatherer. The ill-paid and over-worked Doctor, who is always a man of good professional education, and worthy of a better career, is neither able, nor is he called upon to superintend the obstetrical and pharmaceutical departments, were it only because he cannot be ubiquitous in his six or seven villages, where the wisdom of the *sage-femme* and the household drug is in daily and hourly demand. No wonder, then, if these localities, but more especially such as are without an appointed *Medico-condotto*, fall an easy prey to charlatanism.

The wandering *taumaturgur*, the prototype of Dulcamara, the hawker of nostrums, and the old woman professing to be a midwife, are always welcome visitors and thriving settlers in such places, especially if they know how to break the dreary monotony of village life by some amusing tricks.

VACCINATION.

That under such circumstances vaccination cannot be properly attended to is natural enough, although the Regulation of June 14, 1859, concerning this important branch of public hygiene, is quite a masterpiece of curial literature. In Florence and other large towns vaccination is most admirably provided for, and every Friday morning the office at the St. Annunziata Hospital is thronged with persons who are gratuitously vaccinated. But most of these are country people who have brought their children from a distance, some as far as twenty miles, and as their opinions on the necessity of vaccination are as unsettled as any academicians, it must be presumed that cupidity rather than parental duty brings them here, as they re-sell the lymph taken from their healthy children, to the weakly progeny of the rich Florentines. But for the prospect of this little job, they would most likely remain away and trust their children to chance and the Madonna.

BURYING THE DEAD.

Many Tuscan villages have no cemeteries, and considering that Italian villages are not built like those of England, but are always compact groups and lines of houses, differing from towns in nothing but size, it is the more to be regretted that one of the most elementary rules of public hygiene is so grossly neglected. The insalubrious custom of burying the dead within the churches is still to be found in many places which otherwise have good reasons for calling themselves cities.

ITALIAN CHARLATANS.

In enumerating these various defects, abuses, and nuisances, I cannot help adding a few remarks on the important item of charlatanism. It would be unfair to say that Italy is the native soil of this curious plant, which seems indeed, if properly protected, to thrive under all latitudes and in all climes; but here, at all events, it thrives in the open air, not allegorically, but literally. Anyone who has seen our friend Dulcamara on the stage, can picture to himself what goes on every Friday morning on the Piazza della Signoria in Florence.

The "Doctor," standing on his carriage, addresses his rustic audience (for it is market-day) in forcible language, emphasized by still more forcible gesticulation, occasionally ridiculing the so-called Medical Profession, but always descanting in never-ending repetitions, on the excellences of his own prescriptions and the hidden virtues of his cerate and ointments. He finally winds up his performances with the extraction of a few teeth, and the sale or even gratuitous distribution of his arcanums. He is decidedly an amusing fellow, and often liberal, and even generous. He scorns mercenary imputations, but makes a fortune in spite of himself; for to tell the truth, this public performance in the square is nothing but a prelude to his office hours at home, where he "reaps the whirlwind." He and his predecessors have always been kindly treated by the authorities, who are willing to connive at his practice, on condition that he pledges himself to act strictly on the *nil nocuisse* principle, and to sell nothing but ceratum simplex and the different varieties of aqua fontana. Perhaps they are not so far wrong in this indulgence. A French proverb says, "La médecine guérit quelquefois, soulage souvent, console toujours." The consolation afforded by medicine is independent of its accidental efficacy,—and why withhold cheap consolation from the poor?

But there is another man in Florence, very different from our amusing Dulcamara, half Leroy, half Barnum, and of European celebrity. Signor Pagliano, the inventor and sole manufacturer of the cathartic *Sciroppo Pagliano*, was once an apothecary's "boy." He is now a professor, a speculator at the Bourse, and proprietor, nay, even the manager and director, of the largest theatre in Florence, and which justly bears his name, as it was built out of the enormous profits which he derived from the sale of his cathartic syrup. Many people think that Signor Pagliano built his theatre out of sheer love of patronage, arguing that he is never so happy as when surrounded by singers and dancers, or giving audience to some stage-goddess who does not mind giving him the title of Professore, if she can thereby get a little more money out of him. I am told that this theatre, though admirably managed, is far from being profitable, and often draws on the Professor's balance to an alarming extent. But for that he does not care, and he willingly offers thousands on the altar of Thalia, content with getting in return the dear title of Professore. Now, one should not speak too harshly of a man who has music in his soul, as the Professore certainly has; all I wish to say is, that his celebrated drug has not always proved to be a harmless remedy, and seems to contain some violent drastic ingredients; and this gives a touch of criminality to what would otherwise be a harmless humbug. The syrup has had its greatest success in Austria and Russia, whither enormous quantities are exported every year. It is also extensively used in the Neapolitan provinces, where the Professor has a succursala; but in Florence he seems doomed to share the usual fate of "prophets at home." On a recent application to some apothecary's shop for a "bottle of Pagliano," the person was told, with rather undue indignation, that he must apply elsewhere for such *roba da ciarlatano*.

Some time ago, an itinerant charlatan advertised himself with great impudence in the provincial papers, and even threatened to come to Florence; to secure success he had persuaded a young Doctor who had just passed his examination (and who is evidently more fool than knave, though both without a doubt) to lend him his name and newly-acquired title. This roused the indignation of the Medical Profession, who, with one stroke of the pen, unmasked this would-be impostor, and frustrated the further proceedings of his accomplice. If I am rightly informed, this incident is

likely to lead to more general and more important results. In fact, the new order of things inaugurated by the Revolution of 1859 and the growing habit of publicity and free discussion, cannot fail to produce some wholesome reaction against the *laissez-aller* system of the old *régime*. It has already led to a thorough investigation of the nature and extent of many of the evils above mentioned, and a few months ago a Commission of Medical men, under the presidency of M. Calderini (since dead), and appointed *ad hoc* by the Gonfaloniere of Florence undertook to study the best means of correcting these evils. It is gratifying to see that the Report of this Committee, a very ably-written document, lays particular stress upon the necessity of appointing Physicians for the poor, the establishment of dispensaries, the due registration of births and deaths, the regulation of the police of insalubrious trades, the establishment of public baths, and several other provisions of minor importance. All these matters are in a fair way of being settled; but there are two very important points which have not been touched upon in this document, as not belonging to the province of the municipality. The Medical Profession of Florence, who seem determined to make the most of this opportunity, intend taking matters into their own hands and to prepare a petition to Parliament on the subject. The two points in question are,—1. The bettering the condition of the Tuscan Medici-condotti. And 2. The providing against the different kinds of illegal practice of Medicine, Pharmacy, and Midwifery. The justice of the first demand will be readily admitted, and nothing further need be added to prove the really distressing condition of the *Medico di campagna*, of whom it has justly been said that he is a poem in three words. As to the second point, it is a most necessary and legitimate measure of defence, not so much against Charlatanism, which ought to be attacked on higher and strictly moral grounds, as against the unfair competition of foreign Practitioners. In order to view this measure in its true light, and not to attribute it to what might be called Italian know-nothingism, it should be borne in mind that no civilised country ever offered more liberal terms to the foreigner than Italy. Freedom of Profession can, indeed, not be carried further than it is here. Neither special licences, taxes, examinations, nor verifications of diplomas, in fact no legal formality of any kind, stands in the way of the foreigner who comes here with the intention of practising Medicine, and it is really incomprehensible why no wholesale impostor has ever ventured on this easily-accessible ground. Although this excess of confidence or of hospitality has, as far as I know, never been abused, the Italians are, nevertheless, justified in providing against possible contingencies. Nor do the petitioners seem to be animated by exclusive or clannish feelings. They are ready to waive all retrospective claims, and to accept those Foreign Practitioners who are actually settled here as their lawful colleagues, and it is only the new comer whom they desire to subject to a kind of revisional law. As, however, an examination without previous personal acquaintance is not a very good criterion for skill, and is apt to become vexatious, they will content themselves with a simple revision of diplomas, provided the same advantage be offered to Italian Doctors by Foreign Governments. Reciprocity would have to be secured by special treaties or corollaries to commercial treaties. The idea is new, and, I think, sensible; for, in the present state of academical education, there could be no danger in removing the provincial barriers and old-fashioned turnpikes which still obstruct the high road of our common Fatherland, the great Republic of Science.

GENERAL CORRESPONDENCE.

ANIMAL TEMPERATURE.

Letter from Dr. Althaus.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the last number of your Journal a letter from Dr. Tripe appears on "Animal Temperature," in which the accuracy of the statement of your Leipzig Correspondent, concerning the temperature of the human body, is called in question; and as this subject is just now attracting a large share of attention, I wish to correct the erroneous impression which might be conveyed to some of your readers if Dr. Tripe's letter were to remain unanswered.

It is, then, by no means "the most convenient and most certain mode of conducting such an inquiry" if, as that gentleman recommends, the thermometer is placed under the tongue. The cavity of the mouth is, on the contrary, the worst part where the thermometer can be put, as the temperature there continually varies according to the quantity and temperature of the inspired air; and even larger differences than those observed by Dr. Tripe may be seen if the atmosphere is cold and deep inspirations are made. The place for measuring the temperature most exactly is the anus; but as this mode of proceeding is connected with some inconveniences, the axilla is, generally speaking, to be preferred. The thermometer should be introduced horizontally, below the pectoralis muscle, brought in close contact with the skin of the axilla, and then be covered up. If this be done, the mercury rises at first rapidly, and afterwards slowly, according to Ludwig's law of the differences of heat; but, although Professor Wünderlich's statement, as given in your last number, that 5 to 10 minutes are generally sufficient for making such an observation, is quite correct, still it is a fact that the thermometer does not show a constant heat until half an hour has elapsed after its application, the reason of this being that it is not immersed into a liquid. For practical purposes, however, the time named by Professor Wünderlich is in most cases quite sufficient.

In measuring the temperature of the body, we must always keep in mind that it is only the blood which has a constant temperature when in its normal condition, viz. 98·6° F., and that the heat of the external parts varies according to position, clothing, etc. The variations observed in the temperature of a healthy man do not amount to 3° F., as stated in the letter mentioned above, but only to about ½° F. (0·54), and are caused by the food which is taken. In a series of experiments on this point which were some time ago undertaken in the Charité Hospital at Berlin, by Professor Traube, the following results were obtained:—

The temperature was	98·24°	at 7 a.m.	
,, ,,	98·69°	at 10 a.m.	(after breakfast)
,, ,,	98·65°	at 1 p.m.	
,, ,,	98·78°	at 5 p.m.	(after dinner)
,, ,,	98·24°	at 7 p.m.	

If no food is taken, a continuous fall in the temperature is observed, as was already remarked by Chossat in his researches on inanition.

I may also say that a thermometer from which tenths of degrees C. and fifths of F. may be read off is generally quite sufficient for these observations; but it is well to know that the freezing point is too high in most thermometers, and that this always rises more or less after a time, so that a revision of the thermometer used in such researches is now and then necessary. I am, &c. J. Althaus, M.D.

18, Bryanston-street, October 14.

THE RUGBY ROMANCE.

Letter from Dr. Scott.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having read in your last week's Number, some comments on the above case, wherein you very naturally remark that, "after reading of the sensation created in Court by the appearance of the poor little sufferer, with his head enveloped in lint and bandages, and his leg in splints, the public naturally looked for some Medical testimony or report of the case;" as the Physician under whose care the child was placed, I feel called upon, in some measure, to account for this deficiency, and this I trust I can do, as far as I am concerned, very satisfactorily.

That there was no disposition on my part to withhold any information as to the state of the poor little sufferer's health, I think, will appear self-evident, when I send you a copy of the report which, at the request of the mother, was forwarded to that lady the day previous to the hearing of the case at Rugby. This she placed in the hands of her legal adviser, Mr. Cook, who so ably conducted the case, and, let me add, was the mainspring in bringing this extraordinary affair to light, and leading to the recovery of the child. Medical evidence, however, notwithstanding it had so strong a bearing on the case, was found to be unavailable,—that is, at this stage of the proceedings. The accused being charged with

falsifying the register, and not as the prime mover in the disposal of the child, nor the remote cause of its sufferings, consequent on the privations to which it had been exposed, any attempt on the one side to bring forward evidence as to its precarious condition would have been met on the other by "that is not the question." This, I think, sufficiently explains the reason why—that, notwithstanding lawyers, detectives, the accused, and the women to whom the child was consigned—all figured prominently before the public—the Doctor, or rather his report, could not put in an appearance.

"11, Upper Woburn-place, Russell-square,
September 20, 1861.

"Dear Madam,—With regard to the condition of your little boy at the time he was brought to me for Medical advice, I think I cannot do better than forward you the following extract from my case-book.

"I am, my dear Madam, yours faithfully,
"HENRY SCOTT, M.D.

"Mrs. Guinness Hill."

"September 11, 1861.—Mrs. Hill's child; sex, male; age, two-and-a-half years; appearance, pale, anæmic, and somewhat emaciated. Prominent symptoms: general debility, disordered bowels, tympanitic abdomen, and decided indications of tubercular cachexia (or a scrofulous habit of body). Large suppurating tumour on the cheek, with enlargement of lymphatic glands of the neck, from deposit of tubercular matter. Pustular eruptions behind the ears, and sundry sores and blotches on other parts of the child's body.

"*Remarks.*—From the history of this case, and reported health of parents previous to the birth of the child, this scrofulous condition does not appear to be congenital or hereditary, but acquired, as among the very poor, by depraved nutrition, brought about by scanty or unwholesome food, deficient clothing, exposure to cold and damp, impure air, and the putrid emanations of a crowded, filthy dwelling,—in short, by the poverty and wretchedness to which the child has been exposed. "HENRY SCOTT, M.D., etc. etc."

The above merely applies to the child's condition at the date specified. From day to day various complications manifested themselves. During the first week, in addition to the symptoms named, there was great weakness, irritability, and restlessness, with a considerable amount of hectic fever, inordinate appetite, irregular bowels, hard, tumid abdomen, giving an impression to the hand of mesenteric enlargement, and indurated glands. On opening the abscess referred to, there was an abundant discharge of the characteristic pus of scrofulous inflammation. Besides the eruptions on the skin and the other symptoms directly due to tuberculosis, the scalp became the seat of epiphytic growths, in the form of favus crusts; while added to the vegetable parasites, there was a goodly crop of other hangers-on, of the epizoic tribe.

In regard to the cause or origin of this child's condition, I have mentioned the term "acquired," which certainly the history of the case would seem to warrant, considering the impoverishing circumstances and exciting causes of debility by which the child was surrounded. Scanty food, or coarse fare, unsuited to its tender, growing years,(a) exposed by day to cold and damp, with insufficient covering, and caged by night in that uncongenial lodging, crowded with its half-starved, half-clad, and unwashed inmates, breathing the polluted atmosphere of a place pregnant with all the miasmatic and morbific influences for which such localities are famous, or we may say, infamous. But whether inherited or acquired matters not; the same circumstances in either case would lead to much about the same consequences. If there was an hereditary predisposition, these causes, by lowering the vital powers, and impairing the several processes of nutrition, are precisely those capable of calling that dormant tendency into activity. If, on the other hand, there was no latent cause, their debilitating effects would lead to the spontaneous development of this cachectic condition, and the deposit of tubercle, and that as certainly in the tissues of this child's body, as in young porkers, rabbits, or guinea-pigs, deprived of proper nourishment, pure air, and solar light, shut up in dark cellars, or confined in close, dirty, unwholesome places. I am, &c.

HENRY SCOTT, M.D., etc.

(a) I have been credibly informed that frequently, for days, this poor child was fed upon cabbage-stalks found among the refuse of Covent-garden.

ACCIDENTAL POISONING OF MR. BARKER.

LETTER FROM MR. CLARKE.

[To the Editor of the Medical Times and Gazette.]

SIR,—As the case of Mr. Barker is somewhat peculiar, perhaps you will find room for the accompanying in the *Medical Times and Gazette.*

I was called on the 11th instant at about one a.m., to Mr. Reilly, the gun-maker's in Oxford-street. I found the manager on the floor of the shop just dead. I was told that poison of some description, aquafortis it was assumed, had been taken by him by mistake for a black draught. I elicited that he had been ill all the evening, suffering from severe pain in the abdomen; that shortly after going to bed, the pain being very acute, he had directed his wife to fetch from a certain drawer in a safe in the shop, a black draught; that she, from some presentiment of evil, believing the draught to have been there some time, most earnestly begged of him not to take it, but either to send for the family Medical attendant, or wait until the morning; but that, rendered irritable by his suffering, he insisted on her fetching it, giving her two keys, one of the safe, and the other of a drawer in which he had been accustomed to keep the said draught. She accordingly fetched the bottle, and on his taking it, he cried out, "You have brought the wrong bottle, and given me aquafortis." In much alarm he got up, and they went down together in haste to get mustard and water, which he took, and in the act of going up-stairs, he fell dead. My Medical assistant, on the production of the bottle brought down from the bed where it had fallen, and which contained about three drachms of a dirty, lightish grey fluid, declared that it smelt of prussic acid. Having a cold, I must confess that neither then, nor since, has it been patent to me; however as the man had died instantly on falling, as the pupil was dilated, I accepted the proposition, ignoring the idea of the contents having been prussic acid, from the period which elapsed between his having taken it and that of his death, but I considered it not improbable that the bottle might contain a milder form of the poison in some shape or other, and I fancied it might be essential oil of almonds used for the hair. We rubbed strong ammonia for form's sake on the region of the heart, and applied it to the nostrils, but the man was evidently dead, and had been so for some minutes. I had taken my stomach-pump. On the morning of the 13th, nearly three days afterwards, by direction of the Coroner, the bottle containing the remainder of what he had taken was delivered to me by the police, and at twelve noon, I made a post-mortem with the assistance of two other Medical men and my own assistant.

I found the brain firm and perfectly healthy. A very slight effusion of blood, not more than might have been from opening the cranium, in short, presenting nothing unusual. In the thorax, the right lung unusually healthy, the left healthy in structure, but adhering (an old adhesion) in its whole surface to the ribs, and so strong that it required much effort to separate it. The heart about half full, the valves all right, and its structure healthy. On opening the abdomen, I found on the lower portion of the jejunum and ilium several large spots of gangrene, some much larger than the space which a five-shilling-piece would cover. There were, perhaps, a dozen of these, great and small, the rest of the surface of those intestines being of a perfectly healthy structure, leaving no doubt whatever that this condition had not intervened after death. The left kidney, spleen, pancreas, and bladder were healthy, as was the liver. The right kidney was enlarged, and on cutting into the pelvis of it, about a teaspoonful of pus was apparent. I carefully removed the stomach with its contents, and brought it home with me. On opening the stomach in the presence of my friend, Dr. Squire, of Duke-street, an experienced analytical chemist, I found no abrasion or inflammatory action on its villous coat, and, indeed, nothing to indicate that any poison had been taken. By analysation we discovered that the remainder of the contents of the bottle (a portion of which had been administered) contained a very weak solution of cyanide of potassium, used to stain gun-barrels; but by the most careful, and several times gone over, examination,—even by distillation and analysation—no trace whatever could be discovered of that poison in the contents of the stomach.

At the Coroner's inquest much extraneous matter was introduced, having nothing to do with the case. On my having

stated that I conceived that, in the state of the bowels and right kidney, I found quite enough to account for death, even had no poison whatever been taken, there was considerable hesitation as to the verdict, but what I said was at length adopted—"That he, being in a very weakly state of health, his vital powers being very small, his death was accelerated by a dose of cyanide of potassium, taken by mistake."

After the inquest I handed to the Coroner the following protest:—

"We the undersigned, Dr. Gray and Mr. Clarke, beg to express our strong conviction that, in all cases of poisoning, it is highly necessary and important that the post-mortem examination should take place at as early a period as possible. We give this opinion without reference to any particular case or party; but we cannot refrain from giving it as our decided opinion, that in most cases it might easily be arranged to perform it within twelve, or at the utmost twenty-four, hours after death; and we believe that, in many cases, the furtherance of justice will be promoted thereby."

I am, &c. Francis Clarke.

14, Henrietta-street, Cavendish-square, October 16.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, October 2, 1861.

Dr. Tyler Smith, President, in the Chair.

Mr. Spencer Wells exhibited

TWO OVARIAN CYSTS REMOVED BY OVARIOTOMY.

The first was removed from a single woman, 27 years of age, who had never been tapped, on August 7. It was chiefly a single cyst; but a small group of secondary cysts had led to the rejection of iodine injection. The cyst contained forty-four pints of fluid. The patient is quite well. The second cyst was compound. The largest cavity had held twenty pints of fluid. The patient was single, 35 years of age, and had been tapped twice. Ovariotomy was performed on August 15, and the patient rapidly recovered.

Mr. Spencer Wells also presented a

STONE FROM THE FEMALE BLADDER,

which he had removed the day before from a patient 54 years of age, after dilating the urethra by his fluid dilator. It weighed eight drachms and fifteen grains, but was easily removed. The chief point of interest to Obstetricians was that the patient had been treated for several years for supposed incurable disease of the uterus; but Dr. Savage, on being consulted, at once detected the true cause of the suffering, and requested Mr. Wells to remove it.

Dr. N. C. Hatherly related a

CASE OF PELVIC CELLULITIS.

C. P., aged 29, was seized, five weeks after an easy labour (her second), with pain of left iliac region and groin, attended with pelvic fulness and difficult micturition. This terminated after ten weeks in abscess, which pointed, and was opened on December 26, just above Poupart's ligament, giving exit to thirteen ounces of pus. On the 25th the discharge, which had been very profuse, suddenly ceased, when tumefaction, with pain of left thigh, opposite the saphenous opening, took place, and in six days a large abscess had formed there, which was opened by valvular incision, and gradually emptied. This was followed in five days by symptoms of pyæmia, from which she rallied under a stimulating and generous scale of food and medicine, and ultimately recovered. She became pregnant again in twelve months, and in due time passed through her parturient and puerperal states without a bad symptom.

A Paper, by Dr. Aveling, was read, entitled

HISTORICAL NOTES ON DISPLACEMENT OF THE UNIMPREGNATED UTERUS AS A CAUSE OF DISPLACEMENT OF THE GRAVID ORGAN.

The object of this paper was to show that displacement of the unimpregnated uterus as a cause of the displacement of the gravid uterus was known and pointed out by Morgagni, and that the same views have since been held by several members of the Profession, who have arrived at the same conclusions, each unconscious of the other's writings.

Dr. Tyler Smith observed that the object of the Author seemed to be to show that his (Dr. Smith's) views on the cases of retroversion of the gravid uterus had been anticipated by Morgagni and others. His own paper, which had been referred to, was exclusively directed to the subject of retroversion; but it was remarkable that in the quotations given by Dr. Aveling there was not a single practical observation upon retroversion of the gravid uterus. The displacements referred to were the different forms of lateral obliquity of the pregnant organ. Only one of the authors cited spoke at all of retroflexion, and then in a purely speculative manner. His own view, as opposed to that of William Hunter, that retroversion of the gravid uterus was caused by the impregnation and development of the previously retroverted uterus, was published in 1856, and it had not yet been shown that this fact had been understood by previous writers.

A Paper, by Dr. Little, was read

ON THE INFLUENCE OF ABNORMAL PARTURITION, DIFFICULT LABOUR, PREMATURE BIRTH, AND ASPHYXIA NEONATORUM ON THE MENTAL AND PHYSICAL CONDITION OF THE CHILD, ESPECIALLY IN RELATION TO DEFORMITIES.

The Author introduced his subject by stating that pathology had gradually taught that the fœtus in utero was subject to diseases similar to those which affect the economy at later periods of existence, and that this was particularly true as regards deformities. Thus we had congenital and non-congenital club-foot, rickets, degeneration of muscles, and amputations in utero. But there was another epoch of existence, namely, the period of birth, during which the fœtus was subjected apparently to conditions differing from those of either its earlier or later existence. He said the object of his communication was, to show that the act of birth did occasionally imprint upon the nervous and muscular system of the nascent organism very serious and peculiar evils. Nearly twenty years ago the Author had shown that premature birth, difficult labours, mechanical injuries during parturition to head and neck where life had been saved, and convulsions following the act of birth, were apt to be succeeded by a determinate affection of the limbs of the child, which he then designated "spastic rigidity from asphyxia neonatorum." Medical writers, he continued, seemed unaware that abnormal parturition, besides ending in the death or recovery of the child, had another termination—namely, in other diseases. He stated that, in orthopædic practice alone, he had met with probably two hundred cases of spastic rigidity, or paralysis, from this cause, and he believed he was now able to form an opinion of the nature of the anatomical lesions, and the particular abnormal event at birth on which the symptoms depended. The state of things in the fœtus at the moment of birth—at the moment of entire withdrawal of placental or maternal circulatory influence—was one of imminent failure in decarbonization of the blood. If pulmonary respiration were not immediately established, the state of suspended animation, asphyxia neonatorum, took place. This, he inferred, was followed by stagnation of blood in all the large venous channels, and inevitable congestion of the capillary systems of the brain and spinal cord; and, if this state were not relieved by respiration, death ensued. He stated that the latest writers on the morbid anatomy of still-born children prove beyond a doubt, by their dissections, that punctiform ecchymoses are present, as a rule, on the serous surfaces of the chest and abdomen, besides intense congestion of all the viscera, blood extravasations between the pericranium and cranium, and on the dura mater, capillary apoplexy, and engorgement of the vessels and sinuses of the brain with blood, in children born dead, whether from interruption of placental or insufficient pulmonary respiration, caused by pressure on the umbilical cord, premature separation of the placenta and uterine hæmorrhage; also similar ecchymoses on the lungs and heart of prematurely-born children who had lived some time. Through these dissections he was convinced that mechanical injury to the fœtus was not necessary for the production of the above morbid states. The Author attributed to the interruption in placental circulation and non-substitution of the pulmonary circulation the internal congestions, capillary extravasations, and serous effusions, which corresponded with or produced the symptoms of asphyxia, suspended animation, apoplexy, torpidly tetanic

spasms, convulsions of new-born children, and the spastic rigidity, paralysis, and idiocy, subsequently witnessed. His opinion was, that asphyxia neonatorum, through injury to nervous centres, was the cause of the contractions which originate at birth—more or less general spastic rigidity, and sometimes of paralytic contraction. The former class of affections he described as impairment of volition, with tonic rigidity, and ultimately structural shortening in any degree of few or many muscles of the body, varying in effect from the slightest impairment to complete imbecility of mind and body. He stated one fact as common to all the forty-seven cases of persistent spastic rigidity appended to his paper—namely, that some abnormal circumstance had attended the act of parturition, or rather the several processes concerned in separating the fœtus from the parent. There were few, if any, cases, he believed, of general spastic rigidity referable unequivocally to any illness subsequent to the establishment of proper pulmonary respiration, though spastic contraction of a single set of muscles after infantile convulsions and other illness was an every-day occurrence. He remarked that asphyxia neonatorum was very apt to be accompanied and followed by convulsions, as convulsions at or subsequent to birth were only a symptom of lesion of nervous centres, though they might doubtless react on those centres, and thus probably aggravate the disorder. The author had post-mortem particulars of only one of the cases of spastic rigidity he had referred to asphyxia at birth, but he believed that, if examined post-mortem, after living many years an anatomical condition very different from that present at or soon after birth would be found, and that, although the effused blood might be absorbed, atrophy of the brain, or possibly chronic meningitis with effusion, chronic meningeal hyperæmia, or myelitis would result. This was confirmed by the single case examined after death. Cases of deformity of cranium, and some frequently described as congenital idiotcy, he attributed to severe lesions caused by mechanical compression and extensive hæmorrhages within the cranium; and in addition to the undoubted instances in which cranial injury and some imperfect development of intellect stood in the relation of cause and effect, he appended cases showing impaired intellect in some of which no mechanical injury had taken place, but in which suspended animation, asphyxia neonatorum, and probably its consequent general and capillary congestion and ecchymosis, capillary apoplexy of the brain as well as of the spinal cord, and, perhaps, a moderate amount of larger apoplectic extravasation, had taken place, and had been imperfectly recovered from. Affections of the functions of organic life, protracted inability to suck and swallow naturally during the first few weeks of life, the liability to what was classed under the name laryngismus stridulus, he referred to injury at base of brain and medulla oblongata, such as capillary apoplexy consequent on suspended animation, without previous violence to head and neck. The author mentioned cases of death shortly after birth from convulsions and trismus nascentium, recorded by Joerg, Marion, Sims, Evory Kennedy, and Doherty, who seemed unaware that some of these cases escape death and become affected with general spastic rigidity. He considered himself justified in referring spastic rigidity, following asphyxia at birth, to lesion of the spinal cord, as that was the only nervous centre which invariably presented symptoms of lesion in all the numerous cases of injury from abnormal parturition, independent of mechanical injury, appended to his paper. As additional evidence of the dependence of the several states of the nervous centres upon asphyxia after abnormal labour, the Author mentioned that recovery from asphyxia from choke-damp and suspension was apt to be followed by cerebro-spinal disease, and that he had found extravasations at autopsies after the asphyxia of Asiatic cholera. He related also cases of wry-neck and paralysis due to injury at birth. The paper was illustrated by photographs and a copious appendix of cases.

Dr. Barnes said, that although not able, from his own observation, to produce any facts in confirmation or negation of Dr. Little's theory, this might be due to his not having studied the subsequent history of children in connexion with the phenomena attending their birth. He was now able to look back upon a considerable number of children who had been born semi-asphyxiated, in consequence of difficulty involving resort to the forceps, or turning. Many of these children he knew were healthy, and did not appear to bear any trace of the difficulties that attended their birth. He had, like most Obstetricians, observed that occasionally children born with difficulty were liable to convulsions for a short time; but if these survived, they commonly did well. The difficulty there appeared to be in discussing this excellent paper, arose no doubt from the entire novelty and originality of the subject. Dr. Little had brought before the obstetric world new matter for inquiry of the highest interest. It was closely related to the question of the causes of still-birth—a subject, also, of which little was known, at least in this country. One reason was, that there existed no large Lying-in Hospitals in England, for there could be no doubt that the Lying-in Hospitals of the Continent lent greater opportunities for investigations of this kind than existed here. Hence Dr. Little had been obliged to look to German authors for information. He (Dr. Barnes), however, hoped that the study of the causes of still-birth would be more closely prosecuted by post-mortem examinations in this country. There was a case of which Dr. Little might be glad to avail himself. It is recorded of Samuel Johnson that "he was born almost dead, and did not cry for some time." The name of Samuel Johnson was almost synonymous with intellectual grandeur, but he was well known to be affected with certain nervous disorders which Dr. Little could better interpret than the speaker.

Dr. Tyler Smith expressed the great obligation of the Society to Dr. Little for his valuable paper. There could be no doubt the Author had directed attention to an original field of observation in pointing out the injuries to which the nervous system was liable during, and immediately after, birth. Cases of paralysis and contraction had not fallen under his (Dr. Smith's) observation, but he quite agreed with the possibility of their occurrence from the causes stated. In cases of spasm of the limbs, especially the lower extremities, shortly after birth, he had attributed the condition of the limbs to an excess of the tonic contraction of the muscles natural to the fœtus in utero, and which gradually disappeared under the influence of volition and the use of the limbs. He thought dentition the great source of paraplegia and hemiplegia in young children. The irritation of teething sometimes caused paralysis by exciting convulsions, during which the nervous centres were damaged. At other times, reflex paraplegia ensued without fits during dentition. These forms of disease were very commonly met with, especially in Hospital practice, in children from six months to two years of age. The great point was to prevent these seizures by relieving the irritation of dentition by timely scarification of the gums, and attention to the secretions.

Dr. Gibb said he was reminded of an instance that came under his observation some years ago, but which, perhaps, hardly came within the same category as those described by the Author of the paper. After a lingering labour, a child was born with spastic rigidity of all the muscles on one side of the body; in fact, it was an instance of congenital hemiplegia. Suspecting that the cause existed in the brain, he was allowed to make an examination of the body of the infant, and found a clot in the substance of the brain, on the side opposite to that in which the hemiplegia existed. The vessels generally were very much congested about the head, and, no doubt, had the child lived, it would have remained palsied. The case was recorded at the time in one of the Medical journals (a).

Dr. Little said he quite agreed with the President that the majority of infantile spastic and paralytic contractions arose between the ages of six months and two years from cerebro-spinal disorders, and that, perhaps, for one that depended on abnormal or premature labour there were twenty or more from other causes incidental to later life. He mentioned that, not having found any reference to the affections consequent on abnormal and premature parturition in the works of English Medical writers, he had referred, with some confidence, to Shakspeare, to ascertain whether any notions on the subject were contained in his works. He said the description of the physical character of Richard III. was exactly that of an individual afflicted with one kind of deformity originating at birth (b). He was convinced Shakspeare had drawn the

(a) The *Lancet*, Nov. 13, 1858.

(b) "I that am curtailed of this fair proportion,
Cheated of feature by dissembling Nature,
Deform'd, unfinish'd, sent before my time
Into this breathing world, scarce half made up,

picture from such an individual. He probably was aware of the fact mentioned by Sir Thomas More, that "the Duchess of Gloster had much ado in her travail, he (Richard III.) being born the feet forward."

THE PATHOLOGICAL SOCIETY.

TUESDAY, OCTOBER 15.

DR. COPLAND, President, in the Chair.

AFTER a few introductory remarks by the President,

Dr. GIBB exhibited, for Mr. Baker Brown,

A UNILOCULAR OVARIAN CYST, CONTAINING SEVENTEEN PINTS OF FLUID,

which had been successfully removed from an unmarried female, aged 21, at the London Surgical Home, on September 19. The patient had been the subject of ovarian disease for two years; she had been twice tapped; the cyst rapidly filled after the second tapping, and was readily made out to be single. The case seemed especially suitable for the operation of ovariotomy. The clump was removed on the third day. The patient progressed without a single untoward symptom; she has very much improved in health and flesh, and has been walking about for the last week.

Dr. GIBB laid before the Society, for Dr. David, of Montreal, a coloured drawing of

A HEART WEIGHING FORTY-SIX AND A-HALF OUNCES,

taken from a negro, aged 42, who had been the subject of acute rheumatism and pleuritis. Under treatment, the symptoms of each yielded, when a relapse of the former occurred with great violence, affecting all the larger joints of the body. This entirely disappeared under the use of lime juice, and the patient was convalescent. He, however, went to the closet without putting on any clothes, and on his return to bed was seized with rigors, which ushered in a second severe attack of pleuritis on the right side. As this yielded to treatment, acute pericarditis became developed, and the patient sank at the end of the fifth week of his illness. After death strong pleuritic adhesions were found in the right side of the chest, with much serous effusion. The heart appeared to be enormous; the pericardium was distended by a considerable quantity of deposit of lymph upon both of its surfaces, resembling masses of white tripe. There were no adhesions, but the sac contained eight ounces of clear serum. On removing the heart from the body, it was enormously hypertrophied, and weighed, after being well washed, 46½ ounces; it measured 15¼ inches in circumference, and 6 inches in length. Intense endocarditis was found in both sides of the viscus. The drawing accurately represented the appearances presented by the heart, with the pericardium laid open by a crucial incision, and the flaps reflected backwards. The case was interesting, not only from the great size of the heart, but from the insidious manner in which so large an amount of disease ran its course.

Dr. BRISTOWE showed a specimen of

A HEART WEIGHING FORTY-SIX AND A-HALF OUNCES.

It was taken from a man who died in St. Thomas's Hospital, at the age of 23. There was no life history except that he had been subject to disease of the heart for many years, but he had been about his business until very lately. There was no evident symptoms to call attention to the heart. At the autopsy, except that the liver and kidneys were a little congested, there was no disease except in the heart. The aortic valves were diseased; the pericardium universally adherent. Dr. Bristowe said that he exhibited it not merely as a specimen of greatly enlarged heart, but also in reference to the difference found in its weight when recently removed from the body and when weighed one week after. The difference was ten ounces; it had then been two days in spirit. When weighed for a third time, after it had been four days in spirit, it had lost another ounce in weight.

Dr. GIBB exhibited a specimen of

FRACTURE OF THE OS HYOÏDES,

taken from an adult male subject, about whose history during life nothing was known. The bone had originally been fractured at the junction of the right inferior cornu with the body of the bone; it had united in a faulty position, causing the cornu to become shorter than its fellow, and projecting inwards at its terminal end. The proximal end of the fractured horn was overlapped by the body of the bone to the extent of nearly a quarter of an inch. The terminal end of the same cornu gave evidence of its having formed a distinct joint surrounded by a proper capsule. Dr. Gibb believed that the fracture must have occurred at least a couple of years before death, in consequence of the appearances presented by the bone, together with the formation of a thyro-hyoid joint.

Dr. HARLEY said that some years ago he was called to see a girl, aged between seven and eight, who was nearly suffocated, the symptoms following on an injury to the neck. He found an angular projection in the neck, from fracture of the hyoid bone, and on pushing this projection back, the other half of the bone came forward into its place. The symptoms then ceased, and in a fortnight the child was well.

Dr. TROUNCER exhibited a specimen of

CANCER OF THE PENIS REMOVED BY THE ECRASEUR.

The following is Dr. Trouncer's account of the case:—The patient was a stout man, aged 47. Twelve months ago he first complained of great uneasiness in the left side of the penis, immediately behind the glans, where a small nodulated tumour, situated in the deeper structures, was readily felt, the skin moving over it. The pain and swelling became gradually worse, and defied all local treatment. The last three months the pain occurred in paroxysms, especially at night, and it was at all times referred the indurated tumour, never to the groin nor to the posterior portion of the organ. It was never lancinating, but always of a dull aching character. The patient had for the last six months some mucous discharge from the urethra, which gradually became darker and sanious. Three weeks ago it was decided in consultation with Mr. Henry Thompson to watch its progress a little longer; but during that time the pain increased so much that the patient could bear it no longer, and begged that the penis might be amputated without delay. It was therefore removed by Mr. Thompson with the écraseur on the 12th inst., since which time the man has been free from pain and is going on well. There has been no oozing whatever from the stump—barely enough to stain the lint. On examination the prepuce was slit up, and an ulcerated cavity found occupying the left corpus cavernosum, capable of containing a marble; the surrounding tissues were indurated. The diseased part was wholly isolated by the operation. Under the microscope the structure appeared to be mainly cells and fibres; very little free granulous or other matters. The cells were generally ovoid and nucleated; some were fusiform. Here and there a cell with several nuclei could be detected. Dr. Trouncer then remarked on the advantage of the écraseur in amputation of the penis. The organ had been removed in twenty minutes, and three or four vessels only required ligature.

Mr. CURLING said that he could not agree with Dr. Trouncer in considering that this case showed that the écraseur was better than the knife in amputation of the penis, when by the knife it could be removed in two seconds instead of twenty minutes, and when even three vessels required ligature. In removing the penis by the knife he had not found that there was much continuous hæmorrhage.

Mr. HENRY LEE said that during the last few months he had twice amputated the penis, once by the knife and once by the écraseur. By the latter instrument, however, it was done in one and a-half minute. There was some secondary hæmorrhage after the operation by the knife, but none after the écraseur.

Dr. WILKS had heard his Surgical colleagues say, that in amputating this organ, the urethra ought to be left out for a short way from the end of the stump for fear of retraction. If amputation were performed by the écraseur, it would, he believed, be difficult to prevent retraction.

And that so lamely and unfashionable
That dogs bark at me as I halt by them."

In the following lines Shakspeare has used more poetic licence. The great dramatist has here probably intensified some popular notions on the subject:—

"If ever he have child, abortive be it;
Prodigious and untimely brought to light,
Whose ugly and unnatural aspect
May fright the hopeful mother at the view;
And that be heir to his unhappiness."

Mr. Wood said that the advantage of leaving out the urethra was considerable, and he agreed with Dr. Wilks that this alone gave an additional reason for amputating by the knife. He had adopted a plan of stitching the mucous membrane of the urethra to the skin of the penis, and thus prevented the contraction of the orifice, which was so liable to follow. He had generally found that union took place by the first intention.

Mr. Curling said that he had always in operating slit up the end of the urethra, and stitched the corners to the skin.

Mr. Lee said that he also always adopted the method mentioned, and added that there was not the least difficulty in doing so after the operation by the écraseur.

Mr. Henry Thompson said that in using the écraseur, he had done so with the object of ascertaining the value of the écraseur in this operation. He had very little opinion in its favour, and except having seen it used in Paris, he had not had much experience of it; and there he had not been much impressed with the idea that any advantage was gained by it. But he believed that if it were to be used in any operation, amputation of the penis was the one in which benefit might be expected. In the operation under remark he applied a ligature of silk round the penis, and then applied the écraseur in the depression thus made. That it took twenty minutes, was not because the organ could not have been safely lopped off more quickly, but because he considered that in a vascular part like the penis, it should be done gradually, as under chloroform the length of an operation as regards pain was of no moment. There was at the end of the operation literally not a drop of blood seen; and if the case had then been reported, as cases often were at the close of an operation in an operating theatre, it would have been said that "not one drop of blood was lost," although in these, as in this case, some bleeding came on later. The ligature was applied afterwards whenever the least oozing occurred from any open vessel. He added that there was no difficulty in stitching the corners of the urethra to the skin.

In reply to Mr. Wood, Dr. Trouncer said that union did not take place by the first intention. Mr. Wood thought that this point was one which told against this method of amputating.

Mr. Thompson exhibited, for Mr. Cadge, of Norwich,

A CALCULUS WEIGHING AN OUNCE AND A-HALF, REMOVED BY MEDIAN LITHOTOMY,

and also the bladder and prostate. The following was the history of the case:—A healthy-looking man, aged 66, had suffered from symptoms of stone for three years. He was sounded two or three times, but the stone was not discovered until a sound with a short sharp curve was used, when a stone was felt lying behind a much enlarged prostate. On August 16, Mr. Cadge cut him by the median method, and some trouble was experienced in removing the stone through the prostate. A small oval tumour also came away, but not with the stone; the bleeding was rather free. For six days the patient did not show a bad sympton, the pulse only 70, appetite good, urine clear and free; on the seventh day the tube was removed, a severe rigor came on in the evening, the water was not freely passed; he rapidy sank in only seven or eight hours after the seizure. At the post mortem all the organs were found to be healthy; but there were some cysts in the kidney. The bladder had a large sac, contained a good deal of urine, and the prostate was exceedingly large; there was no sign of cystitis, no pus, and no sloughing, but a little ecchymosis was found at the sides of the bladder, just reaching the peritoneum. The surface of the prostatic lobes was a little abraded by removal of the stone. They were apparently made up of isolated tumours.

Mr. Coulson said that he could not help thinking that there must have been a urinary abscess somewhere to give rise to the sudden symptoms which were so soon followed by death. He had found that in sacculated bladder the secretion of pus went on, and fatal results were more likely to follow than in bladders otherwise healthy.

The President conceived that in this case there must have been a passage of morbid matter into the circulation, but from what point was a matter not easily determined.

Mr. Henry Thompson said that the case reminded him of several cases collected by Dr. Buchanan, of Glasgow, in which such symptoms had come on suddenly, and speedily ended fatally after the median operation. This operation was said to be more liable to be followed by urinary infiltration under the prostate than the lateral. In Mr. Cadge's case the symptoms followed soon after the removal of the tube from the wound.

Dr. Wilks then exhibited

A PIECE OF INTESTINE TAKEN FROM THE BODY OF A WOMAN WHO DIED FROM TYPHOID FEVER IN HER SEVENTIETH YEAR.

The specimen of intestine presented the usual well-known appearances of deposit in the glands of the ileum, and thus was only interesting in connexion with the age of the person from whom it came; for it has been agreed by all observers that *typhoid* is more apt to attack the young, whereas the *typhus* is more disposed to affect those of more advanced age. Thus Dr. Tweedie states that it is seldom observed above the age of fifty years. It is probable, Dr. Wilks said, that a more extended post-mortem examination might show that this statement required some modification, and that it has arisen from the typhoid not displaying itself in so marked a form during life in the aged. Thus, in the present instance, the disease would rather have been styled typhus, had not the truth been discovered after death. The woman was nearly seventy, was in an extreme state of prostration, delirious, no diarrhœa, and no rash of any kind; and thus showing that the age and want of power of the patient are not, as was formerly thought, alone instrumental in the production of the mulberry rash. All the circumstances existed which should have determined the typhus rather than the typhoid, and yet the latter existed with all its characteristics. It was a good case in proof of the specific nature of the disease.

Dr. Wilks also showed a specimen of

ANEURISM OF THE COMMON ILIAC ARTERY.

This came from the body of a man, aged 57, who had been a patient of Mr. Roper, of Shoreditch. The patient had been ailing for some time, and at last died rather suddenly from rupture of the aneurism. The specimen was interesting, as presenting a number of long fissures running through the inner and middle coats of the sac, leaving merely the external coat stretched over them. These had occurred some time anterior to death, as the edges were smooth and rounded.

(To be concluded.)

MEDICAL NEWS.

University of St. Andrews.—The following is a list of gentlemen on whom the Degree of Doctor of Medicine was conferred in October, 1861:—

Armstrong, James	M.R.C.S. & L.A.C.	Armagh
Beaumont, Joseph W.	L.R.C.P. Ed., M.R.C.S., & L.A.C.	Sheffield
Blaxall, Francis Henry	M.R.C.S. & L.A.C.	R.N.
Borrows, Robert	Lic. Fac. Phys. & Surg. Glasg.	R.N.
Cassells, James P.	M.R.C.S.	Anderston, Glasgow
Cronin, Eugene F.	L.A.C.	Westminster
Davy, Humphry	M.R.C.S. & L.A.C.	Penzance, Cornwall
Drury, John Thomas C.	M.R.C.S. & L.A.C.	London
Duggan, William N.	L.R.C.S.	East Indies
Earle, James L.	M.R.C.S. & L.A.C.	Birmingham
Foster, Philip	M.R.C.S.	Leeds
George, Edward	M.R.C.S.	Calcutta
Gray, William John	M.R.C.S. & L.R.C.P. Ed.	London
Hammond, William	L.R.C.S. Ed.	Brechin
Harper, Henry L.	M.R.C.S. & L.A.C.	Chester
Hodgson, Robert W.	L.R.C.P. Ed., M.R.C.S., & L.A.C.	Northallerton
Holman, Henry	M.R.C.S. & L.A.C.	Crediton, Devon
Lidderdale, John	M.R.C.S., F.R.C., & L.A.C.	Kintbury, near Hungerford
Luce, James J.	L.R.C.P. Ed., M.R.C.S., & L.A.C.	London
Lynn, Robert D.	L.R.C.P. Ed. & M.R.C.S.	Newcastle-on-Tyne
O'Donnell, James	Lic. Fac. Ph. & S. Glasg. & L.A.C.	Park-street, Westminster
Osborn, Samuel	M.R.C.S. F.R.C.S. & L.A.C.	Brixton, Surrey
Owen, Harvey, K.	F.R.C.S. & M.A.S.	Clapham-road
Procter, William	M.R.C.S. & L.A.C.	York
Pyburn, James	M.R.C.S. & L.A.C.	Newcastle-on-Tyne
Richards, Caleb C.	M.R.C.S. & L.A.C.	Caerphilly, South Wales
Ricketts, Charles	M.R.C.S. & L.A.C.	Birkenhead, Cheshire
Shea, John	M.R.C.S., L.A.C., & B.A. Lond.	London
Smith, Sidney	M.R.C.S. & L.A.C.	London
Starke, Anthony G. H.	M.R.C.S. & L.A.C.	Hanley, Staffordshire

Tanner, Robert	M.R.C.S. & L.A.C.	Ledbury, Hereford
Tayler, William H.	M.R.C.S. & L.A.C.	London
Thompson, Charles	L.R.C.P. Lond., L.A.C., & M.R.C.S.	Leicester
Waters, A T. H.	M.R.C.P.	Liverpool
Welsh, James	L.R.C.S. Ed.	Crewe, Cheshire
Wollaston, Thomas G.	M.R.C.S. & L.A.C.	London
Woodward, William	M.R.C.S, L.R.C.P.L., & L.A.C.	Worcester
Wyllie, Andrew	L.R.C.P. Ed. & L.R.C.S.	Kirkpatrick, Durham.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — The following gentlemen passed the first part of the Professional Examination for the Licence of the College on the 11th inst. :—

Barrett, John James, St. Thomas's Hospital
Brodie, George Bernard, St. George's Hospital
Chandler, Edward, Charing-cross Hospital
Hicks, John Wale, St. Thomas's Hospital
Owles, James Allden, St. George's Hospital
Rawlins, William Peter, University College
Vernon, Bowater John, St. Bartholomew's Hospital
Willey, Henry, King's College
Woodman, Frederick, Guy's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (a).— The following Members of the College, having undergone the necessary Examinations, were admitted Licentiates in Midwifery at a meeting of the Board on the 16th inst. :—

Belcher, Joseph S., Royal Ophthalmic Hospital, Charing-cross
Howell, Horace Sydney, Maidstone, Kent
Kempe, Charles Patrick, Crugsillack, Cornwall
Owen, Owen, Feramgyd, Anglesea
Rowland, Henry Orford, Birmingham
Stewart, Charles John, Montagne-place, Kentish-town
Taylor, Frederick Woodstock, Oxon.

APOTHECARIES' HALL. — Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, October 10 :—

Armstrong, George William, King's College
Hadwin, Aurelius St. John, Waterloo-road
Lockwood, William, Holmfirth, Yorkshire
Pearce, George, Bishopstow, Wilts
Seller, John Larder, Neston, Cheshire.

The following gentlemen also on the same day passed their First Examination :—

Mottershead, John, Butley, near Macclesfield, Cheshire
Willey, Henry, Greville-road, St. John's-wood.

APPOINTMENTS.

ASHFORD.—Edwin Charles Ashford, L.R.C.P., M.R.C.S. Eng., has been chosen Junior Assistant Medical Officer to the Kent County Lunatic Asylum, Barming-heath, *vice* Mr. Robert Spencer, promoted.

BLADES.—Charles Corbet Blades, M.D., M.R.C.S. and L.M. Eng., L.S.A. Lond., has been appointed Surgeon to the Royal South London Dispensary, St. George's Cross, Lambeth.

BUNKER.—Mr. James Bunker has succeeded Mr. Jabez Austin Franklin as Dispenser to the General Infirmary, Bedford.

BYERS.—Robert Byers, M.R.C.S. Eng., has been appointed one of the District Surgeons (to visit patients at their homes when too ill to go out) of the Royal South London Dispensary.

DAWSON.—William Dawson, M.D. St. And., M.R.C.S. Eng., L.S.A. Lond., has been appointed one of the examiners, for the ensuing year, of the Newcastle College of Medicine in connexion with the University of Durham.

DOWNS.—Peter Downs, M.D. St. And., M.R.C.S. Eng., L.S.A Lond., A.K.C., late Junior House-Surgeon and Apothecary to the Southern Hospital, Liverpool, has been elected House-Surgeon.

EARLE.—James Neale Earle, M.R.C.S. Eng., L.S.A. Lond., has been appointed one of the District Surgeons of the Royal South London Dispensary.

FENWICK.—Samuel Fenwick, M.D. St. And., M.D. Dur., M.R.C.S. Eng., L.S.A. Lond., has been appointed one of the Medical Examiners of the Newcastle College of Medicine.

GUY.—William Guy, F.R.C.S. Eng., has been elected Medical Officer for the Thorpe District of the Blofield Union, Norfolk, in the room of Edward Crickmay, M.R.C.S. Eng., L.S.A. Lond.

HARDING.—George Daniel Harding, M.R.C.S. Eng., lately Assistant House Surgeon to the General Hospital, Nottingham, has been elected House-Surgeon to the Cumberland Infirmary, in place of Daniel Devereux, M.R.C.S. Eng, L.S.A. Lond., who has been appointed Resident Medical Officer to the Middlesex Hospital.

HOLLAND.—Dr. Robert Holland has succeeded Francis J. Dowling, M.B. Lond., M.R.C.S. Eng., L.S.A. Lond., resigned, as House-Surgeon to the General Hospital, Bristol.

HOOD.—William Charles Hood, M.D. St. And., F.R.C.P. Edin., has been appointed one of the Consulting Physicians to the Royal South Lambeth Dispensary.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

JONES.—Richard Jones, Fell. and M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer for the Brackley Union Workhouse, Northamptonshire, in the place of Mr. Frederick Gee (in practice prior to 1815) deceased.

LINDSAY.—Alexander Lindsay, M.D. Glasg., L.R.C.S. Edin., F.F.P.S. Glasg. (exam.), has been appointed one of the Vice-Presidents for the year of the Glasgow Medical Society.

MACNAY.—Thomas Fothergill MacNay, M.D. Durham, F.R.C.S. Edin., M.R.C.S. Eng., L.S.A. Lond., has been appointed one of the examiners of the Newcastle College of Medicine.

MASTERS.—John Masters, M.R.C.S. Eng., L.S.A. Lond., has been elected Surgeon to the Bridgwater Infirmary, Somersetshire, *vice* Henry Brooke, M.R.C.S. Eng, L.S.A. Lond., resigned.

MENZIES.—James Irvine Menzies, M.R.C.S. & L.M. Eng., has been appointed one of the District Surgeons of the Royal South London Dispensary.

MOORE.—Walter Moore, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer for District No. 2 of the Brackley Union, in the counties of Northampton, Oxford, and Bucks, in the place of Mr. Frederick Gee, deceased.

MORTON.—James Morton, M.D. St. And., L.R.C.S. Edin., F.F.P.S. Glasg., has been elected one of the Vice-Presidents of the Glasgow Medical Society.

NUNN.—Roger Nunn, M.R.C.S. Eng., has been appointed Medical Officer for the Cottesford District in the Bicester Union, Oxfordshire, vacant by the death of Mr. Frederick Gee.

PATTEN.—Charles Arthur Patten, M.R.C.S. Eng., has been appointed Assistant-Surgeon to the Portsmouth Convict Prison, in the place of Wm. Ward Leadam, M.D. Univ. Edin., resigned.

QUICK.—James Richard Quick, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer for the Workhouse, and district No. 1, of the Penzance Union, Cornwall, in the place of Arthur Berryman, M.R.C.S. Eng., L.S.A. Lond., resigned.

REID.—John Reid, L.F.P.S. Glasg., has been elected President of the Glasgow Medical Society.

RICHARDSON.—Dr. T. Richardson has been appointed one of the Examiners of the Newcastle College of Medicine.

RUSSELL.—Charles M. Russell, L.R.C.P. & S E., has been appointed Resident House-Surgeon to the National Hospital for the Paralysed and Epileptic, Bloomsbury-square, vacant by the resignation of Charles J. Smith, M.R.C.S. Eng.

SAVAGE.—Thomas Savage, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A. Lond., has succeeded Dr. S. E. Proctor, M.R.C.S. Eng., L.S.A. Lond., resigned, as House-Surgeon to the Birmingham and Midland Eye Institution.

SPENCER.—Mr. Robert Spencer has been promoted to be Senior Assistant Medical Officer, on the resignation of Dr. Hills.

STARKE.—Anthony George Haydon Starke, M.D. St. And., M.R.C.S. Eng., L.S.A. Lond., has been appointed Junior House-Surgeon and Apothecary to the Southern Hospital, Liverpool, *vice* Dr. Downs, who has been elected House-Surgeon.

STOKES.—Mr. William Stokes has been elected House-Surgeon and Dispenser to the West Ham, Stratford, and South Essex Dispensary.

SYMMONS.—Mr. R. F. Symmons (partner to Mr. Roger S. Nunn), was appointed on October 15, by the Board of the Eastern Counties Asylum, as Medical Officer in the room of Dr. Duncan, who resigned in consequence of his removal to London.

VENNING.—Edmund Venning, M.R.C.S. Eng. (1861), has succeeded Mr. Mr. Edward Jeffery, as Assistant House-Surgeon to the General Hospital, Bristol.

DEATHS.

CAIRD.—At 27, Montagu-street, Edinburgh, John Caird, F.R.C.S. Eng.

GEE.—Recently, Frederick Gee, of Brackley, Northamptonshire, in practice prior to 1815.

LEWIS.—October 1, David Lewis, of Bronayron, Llangeitho, Cardiganshire, M.R.C.S. Eng., Mem. and L.S.A. Lond., in practice prior to 1815, Surgeon R.N. (seniority January 7, 1809,) aged 78.

NASON.—October 2, Harrison Nason, of Newtown Lodge, Conna, County Cork, M.D., Univ. Glasg, M.R.C.S. Eng., L.M., Anglesey Hospital, Dub, aged 55.

RAMSAY.—October 12, Peter Ramsay, 101, Chatham-street, Liverpool, M.D. Univ. St. And., F.R.C.S. Edin., M.R.C.S. Eng., Surgeon R.N. (seniority September 9, 1812,) aged 73.

SMITH.—October 2, Mr. J. Smith, of Everton, Liverpool.

WRIGHT.—October 13, after many years' acute bodily suffering and blindness, Thain Wright, of Caversham, Oxfordshire, formerly of Hammersmith, aged 68.

MR. HARRAPP, the well known *rubber* of Brighton, has lately died, aged sixty-seven.

ACCIDENTAL POISONING of an infant, by nitrate of silver, occurred on Monday. The child got hold of a bottle containing the solution and drank it.

ANNIE VALE, described as a midwife, aged thirty-nine, of No. 6, Henry-street, Limehouse-fields, near Stepney Old Church, was charged before Mr. Woolrych on Monday, with administering to Anne Horne a noxious drug, with intent to procure abortion, whereby the life of the latter was endangered. The accused is the wife of Benjamin Vale, who was committed to Newgate last week, on a charge of causing death by criminal abortion. She was remanded for a week.

QUEEN'S UNIVERSITY IN IRELAND. — The Annual Meeting of the Vice-Chancellor and Senate of the Queen's University for the conferring of Degrees was held in St. Patrick's Hall, Dublin Castle, on Friday, the 11th inst., at three o'clock. The degrees were conferred by the Lord Chancellor of Ireland, Vice-Chancellor of the University; the Honours were presented to the successful candidates by His Excellency the Lord-Lieutenant. The following is a list of those gentlemen who received the Degree of Doctor of Medicine, specifying the College in connexion with the University at which each was educated:—With Honours—Acheson George Bartley, First, Belfast; James Hutchinson, Second, Galway; John R. Burke, Third, Galway; John Hamilton Moore and John H. L. Stoney, Fourth (equal), Galway. Without Honours—James Jackson Adair, Galway; Richard Barrett, Cork; Edward Ralph Blackett, Belfast; Michael Breen, Cork and Galway; Leonard Dobbyn Buchanan, Galway; John Patrick Burke, Galway; John Hawthorne, Belfast; Robert William Hooper, Galway; Arthur Joseph Ireland, Galway; William Henry M'Naughton Jones, Cork; Peter M'Corry, Galway; Robert Lowry Moorhead, Belfast; Denis James O'Flynn, Cork; Denis A. Riordan, Cork; George Shannon, Belfast; Mark Batt Tanner, M.D., St. Andrews, *ad eundem*; Edmund Willett, Cork.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 12, 1861.

BIRTHS.

Births of Boys, 865; Girls, 818; Total, 1683.
Average of 10 corresponding weeks, 1851–60, 1610·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	576	537	1113
Average of the ten years 1851–60	524·2	510 8	1035·0
Average corrected to increased population..	..	..	1139
Deaths of people above 90	1	..	1
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphthoria	Whooping-Cough.	Typhus.	Diarrhœa.
West'.. ..	463,373	..	2	11	5	6	5	7
North ..	618,201	..	5	5	2	5	7	7
Central ..	378,058	..	..	11	2	7	6	10
East	571,129	2	..	10	..	10	13	6
South ..	773,160	..	5	23	7	9	12	24
Total.. ..	2,803,921	2	12	60	16	37	41	54

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Robinson's case shall appear.

Dr. Marcet's paper on Death from Chloroform shall appear as soon as possible.

Dr. White.—The account of the case at Sherborne arrived too late for comment this week.

Several letters on the use of Chloroform in Slaughter-houses have been received, but cannot appear this week.

Essences.—The essences of pear, quince, ripston pippin, melon, strawberry, apricot, pine apple, peach, etc., now used by wholesale confectioners are made by various mixtures of fusel oil, butyric ether, cocinic ether, formic ether, œnanthic ether—or some of the methyl or amyl series of ethers: cocinic ether is made by distilling spirit and sulphuric acid after acting on cocoanut oil; œnanthic acid is procured from castor oil.

Un Maître d'Ecole.—It entirely depends upon the rate at which air is supplied and renewed—a man may live in a diving bell with a good supply of air; but he must die if confined in a large air-tight chamber.

ACCIDENTAL POISONING.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Cases of poisoning from the administration of embrocation or lotion instead of mixture are of so frequent occurrence as to have given rise to various expedients for the prevention of such serious and too often fatal mistakes. The one I have adopted for some time is that of having the direction with the word "Poison" in heavy black letters printed on a red paper.

This plan I take to be especially useful where the patients are of the lower class, as in Parish Dispensary or Hospital practice, "the bottle with the red label" being so easily distinguishable from the one containing a medicine for internal administration. I am, &c.

Clayton Hospital, Wakefield, October 14. J. DANIEL MOORE, M.D.

ACCIDENTS BY FIRE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The numerous fatal accidents by burning are beginning to horrify us, and if such things take place at this mild season, what may we not expect when the cold weather sets in, and fires are in full force everywhere?

It is remarkable that when a Coroner's inquest takes place upon cases of this kind, no recommendation goes forth from the jury or other persons, respecting the use of fireguards; but it cannot be doubted that to the want of such a protection on the fire-grate the majority of these accidents may be referred. It is useless to attempt by any attack upon that article of dress called "crinoline," to put the fashion down all at once, but there is no difficulty in purchasing and placing on the bars a fireguard, which is within the reach of all classes, of small cost, and might be made ornamental, so as to obviate the objection. which, I believe, is the cause of fireguards being banished from most houses, viz., that they are a "disfigurement to the room;" and so we find that although the guard may be in use when a room is left with a fire in it, the protection is removed as the family enter,—just the time it is most needed. By all means let us recommend and adopt every precaution likely to prevent such fearful scenes, as some of us have witnessed and all have heard of; but while advocating this and that plan, do not let us banish the fireguard from our bars, as, I believe, it would more than anything tend to lessen the number of accidents by fire. I am, &c.

Brighton, October 14. M. A. B.

[Fireguards by all means!—but gas and candles have been lately as mischievous as fires—so let us have blaze-proof fabrics for ladies' dresses.—ED.]

"THE OSSIFIED MAN."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reply to the query of your correspondent "J. D.," which appeared in your number for October 12, I have much pleasure in informing him that the paragraph which he quoted from "Kneale's Guide to the Isle of Man," respecting the above-mentioned case, is founded on fact.

Upwards of a quarter of a century has elapsed since the man died, and I well recollect, when a boy residing in a neighbouring parish, hearing of his strange illness. Moreover, I had the honour of being articled to the talented and energetic Surgeon, through whose perseverance to overcome all obstacles so rare a pathological specimen is preserved to us.

The scenes enacted on this and other occasions were of so romantic a nature, that I only wish that R. E. Craine, Esq., of Surgeon's-square, Ramsey, Isle of Man, the gentleman referred to, would oblige your readers with an account of them.

However, having as an old pupil, taken the liberty of mentioning my respected friend's name, I am sure he will give every information on being applied to by "J. D." I am, &c.

Rotherhithe, October 14. J. J. CREGEEN, M.D.

COMMUNICATIONS have been received from:—

Dr. JENNER; Dr. CHAMBERS; Mr. BARNARD HOLT; Mr. W. ADAMS; Dr. WEBER; Mr. SOLOMON; Mr. COOKE; Mr. HUNT; Dr. GRAILY HEWITT; Dr. KIDD; Mr. FLETCHER; Mr. ARMSTRONG TODD; Dr. THOMSON; REGISTRAR-GENERAL; Dr. MCCORMAC; Mr. MOORE; Mr. IRVINE; Mr. WOOD; Mr. SQUIRE; Mr. WHEATLEY; and Dr. ROBINSON.

APPOINTMENTS FOR THE WEEK.

October 19. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

21. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Clinical Discussion.

22. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

23. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

24. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

JUNIOR MEDICAL SOCIETY OF LONDON, 8 p.m., at Guy's Hospital. Exhibition of Pathological Specimens. Mr. J. P. Weaver "On Jaundice." Conversazione, Museums, etc., thrown open.

25. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday next:—

By Mr. Fergusson—For Salivary Fistula; External Hæmorrhoids; Examination of Diseased Hip; Examination of Diseased Shoulder-joint.

By Mr. Wood—Radical Cure of Hernia.

PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in ſometimes removing the APOPLECTIC DIATHESIS in "perſons advanced in life. It is, moreover, worthy of obſervation, "that JAMES'S POWDER has been of remarkable utility in "certain inſtances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effuſion. Laſtly, in two caſes of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect ſucceſs."

Alſo *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S "POWDER, in caſes of undue determination of blood to the "head, is that which I have generally purſued. The patient is "made to begin with a very moderate doſe, not more than two "grains at bedtime, and to increaſe the doſe by half-a-grain every "night, until ſome ſenſible effect is produced upon the ſtomach, "bowels, or ſkin. Should the ſtomach be affected with ſickneſs, "the doſe muſt be leſſened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be adminiſtered than the ſtomach could "otherwiſe bear. If the ſkin is ſoftened, or the bowels affected, "the doſe ſhould not further be increaſed, but it muſt be repeated "every night for a conſiderable length of time: in ſeveral inſtances "I have known eighteen or twenty grains taken for a conſiderable "period without any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be ſuch as to require antimonial prepa- "rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery) ſhould be taken at intervals according to circumſtances."

In writing to Meſſrs. Newbery, he ſays:—

"I wiſh that your preparation was always uſed."

To ſecure the diſpenſing of the *original* preparation, which, for 114 years, has been ſold by the houſe of Newbery and Sons, in St. Paul's Churchyard, it is neceſſary to preſcribe it as "PULVIS JACOBI VER., NEWBERY'S," otherwiſe another article (wanting in the beſt properties, and recommended to be given in a different code of doſe, *though called by the ſame name*) may be ſubſtituted for the original medicine.

This ſubſtitution muſt bring diſappointment, and of courſe deter Practitioners from preſcribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

FRANCIS NEWBERY AND SONS.

45, *St. Paul's Churchyard, London.*

Prices for Diſpenſing ¼ oz. Bottle, 3*s.* 4*d.*; 1 oz. 9*s.*
Uſual Diſcount to the Profeſſion.

JEREMIE'S

CELEBRATED SEDATIVE AND ANTISPAMODIC

For Diarrhœa, Cholera, Dysentery, Colic, Nervous Complaints, &c.

From Sir RANALD MARTIN, K.C.B., Physician to the Secretary of State and Council of India.

"I have for many years, both in India and this country, been in the habit of prescribing Jeremie's Sedative in all cases requiring the use of an Opiate, and I have found it of superior value to other preparations."

From Dr. JACKSON, Apothecary-General, Calcutta.

"I have no hesitation in expressing my opinion, that the Opiate preparation known in this country under the name of Jeremie's Sedative is a highly valuable one. During my practice here, I was constantly in the habit of employing it, and always with the most favourable results, in no cases finding that it left behind it the troublesome effects commonly produced by opium, whilst its specific and characteristic power may to a certainty be calculated upon."

From Sir CHARLES D'OYLEY, Bart., London.

"During severe fits of Rheumatic Gout at Patna, large and repeated doses of Captain Jeremie's Sedative were administered to me by Dr. King, and always attended with the effects of completely soothing the pain, and, leaving no bad effects whatever—it has, indeed, I may say, saved my life more than once; and one of its most extraordinary qualities is, that it may be suddenly discontinued without loss of rest."

Jeremie's Sedative is prepared only by SAVORY and MOORE, 143, New Bond-street, London, and is sold in "the novel and ingenious bottles, which regulate and check the dose," (Lancet) adopted by this firm, and generally approved by the Medical Profession and the Public.

Curtis and Co.'s New Remedies, &c.

SYR. QUINÆ FERRIQUE SUPERPHOSPH.
(Originated by Curtis and Co.)
SYR. QUINÆ FERRIQUE SUPERPHOS. CUM STRYCHNIA PHOSPH.
(Originated by Curtis and Co.)
SYR. CALCIS PHOSPHATIS.
And all other Syrups of the Pyrophosphates, Biphosphates, &c. &c.
LIQUOR SUMBULI.
TINCT. ACTEÆ RACEMOSÆ.
MAGNESIÆ CITRATIS (Effervescing).
CADMII IODID.
CERII OXALAT.
Also their
LIQUOR SECALI CORNUTI.
(Recognised Preparation.)

Exhibited at the "Obstetrical Society of London," by the President, June 1st, 1859 (vide the "Lancet," June 11th, 1859).
"University College Hospital, Oct 28th, 1858.

"I have much pleasure in stating, that after numerous trials under Dr. Murphy's direction, I have found the Liquor Secalis, as prepared by Mr. Curtis, to *far exceed* all other preparations of the kind.—HENRY HEMSTED, M.R.C.S.

MANUFACTURERS OF ALL PHARMACEUTICAL PREPARATIONS OF REPUTE.
Orders received at the Manufactory and Laboratory (which is open for the inspection of any Medical gentleman who may honour Messrs. Curtis and Co. with a visit).
48, BAKER-STREET, LONDON, W.

Messrs. Rew and Co. solicit the

attention of the Profession to the following approved Preparations:—

OIL of HORSE CHESTNUTS, applied externally for Gout, Rheumatism, Neuralgia, &c. To prevent disappointment it is necessary to observe that each bottle bears our name and address.

HORSE CHESTNUT POMADE, a most effective application for Hæmorrhoides.

LIQUOR CASTANEA EQUINA.—Two or three doses will often arrest the most acute paroxysms of Gout, and is of great service in Chronic Rheumatism.

LIQUOR ACTEA RACEMOSA (Baneberry), in doses of forty to sixty drops, for Acute and Chronic Rheumatism.

CARBONATE of LITHIA, and OXALATE of CERIUM, at prices according to quantity.

IODIDE of LITHIA (originated by REW and CO.) has been of great service in some most intractable cases of Gout and Rheumatism.

REW and CO.'S LITHIA WATERS consist of four kinds, viz.—Lithia, Iodide of Lithia, Lithia with Potash, Lithia with Ammonia. These are guaranteed to contain a proper proportion of Lithia, and are in every way very superior to the ordinary Lithia Waters of commerce.

R. M. REW and Co., Operative Chemists, 282, Regent-street, W.

Chubb's Patent Safes, the most secure

against Fire and Thieves.

CHUBB'S FIRE-PROOF STRONG ROOM-DOORS.
CHUBB'S PATENT DETECTOR LOCKS and STREET-DOOR LATCHES.
CHUBB'S CASH and DEED BOXES.
Illustrated Price-list gratis and post free.
CHUBB and SON, 57, St. Paul's-churchyard, London.

ORIGINAL LECTURES.

ON TUBERCULOSIS, AND THE EVIDENCES OF THE DEPOSIT OR FORMATION OF TUBERCLE IN THE CHILD.

A LECTURE (a) DELIVERED AT THE

Hospital for Sick Children.

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GENTLEMEN,—In my last Lecture I described the symptoms of acute tuberculization. I have to-day to speak of chronic tuberculization.

With reference to the general symptoms of the chronic forms of tuberculization I need now only remark that no line of demarcation can be drawn between them and those of the insidious acute form I described in my previous Lecture; but the symptoms are less severe, sometimes even so trifling as to escape notice, and they are diffused over a longer time. Before considering the evidences which indicate the tuberculization of special parts, I desire to express what seem to me to be two laws in regard of the etiology of local tuberculization,—viz. that activity of organic life is favourable to tuberculiaztion, and that afflux of blood, active congestion of an organ or tissue in one who is the subject of tuberculosis, may determine the tuberculization of that organ or tissue. The truth of these rules is daily manifested, and the practical consequences in reference to prophylaxis and treatment which flow from them are most important.

There is a point of much interest which must here suggest itself to the pathologist who limits his attention to no one period of life,—viz. the striking general contrast which exists in these respects between cancer and tubercle. Organs which are yet imperfectly developed, but which are on the way to perfection, and organs which are performing their functions with full vigour, are prone to tubercularise. The periods of growth and of active life are the periods most favourable to the formation of tubercle. Organs which have passed perfection, or which have just ceased to perform their functions, are in the state most prone to cancer. The period of languid organic life, or of incipient decay, local and general, is the period favourable to the development of cancer.

Cutaneous and Subcutaneous Tubercle.—The majority of writers have either failed to notice, or have passed by as of little importance, the subject of cutaneous and subcutaneous deposit of tubercle. But it is of importance to detect tubercle in these situations, less for itself than because tubercle formed here is evidence of a profound constitutional taint. Tubercles in the skin and subcutaneous tissue are often associated with, or followed by, tuberculization of bone and its consequences.

Cutaneous and subcutaneous tubercles have often been mistaken for syphilitic, and now and then for glandular, swellings. In the skin and cellular tissue beneath I have seen grey and yellow tubercles—crude and softened tubercle.

The first thing observed is a hard, indolent, painless mass, usually in the subcutaneous cellular tissue about the size of a pea; it may be as big as a small nut. The skin over it is natural in colour and temperature. The little tumour is free from adhesions—it can be moved about in the cellular tissue and the skin can be moved over it. After a time the mass adheres to the skin—the skin becomes discoloured, assumes a purplish red tint, and gives way, and the softened tubercle mixed with pus is evacuated. Less commonly the disease begins in the substance of the skin itself. If all the tubercle have softened before the skin gives way, the whole may be at once evacuated and the part heal, but if it have not all softened, or if fresh tubercle be deposited around, then a small aperture remains, from which every now and then a discharge occurs. The margin and floor of such an ulcer is hard in proportion to the amount of tubercle in the skin and subcutaneous tissue. Deep cicatrices commonly follow on the healing of these tubercular ulcers. They are often called scrofulous. Usually there are not more than four or five collections of cutaneous and subcutaneous tubercle present at the same time, now and then there is one only, and now and then there are a dozen or more. In several of these cases I have seen the bones of the hand become diseased (a model taken from a case of this kind is on the table), and in one case some of the cervical vertebræ suffered. It is in early childhood especially that tubercles are formed in the skin and subcutaneous tissue. I have seen them in a child of eight months old, and in a girl of fifteen; they are most common, I think, between the ages of ten and thirty months. From the evidence they afford of profound diathetic disease, the prognosis in cutaneous and subcutaneous tubercles is always grave.

Tubercles in the Lymphatic Glands.—As activity of functions of a part *disposes to* the formation of tubercle in the same part, and as undue afflux of blood to a part *determines* the formation of tubercle, the lymphatic glands in the child are more often than any other organ (b) the seat of tubercle; for in the child the lymphatic glands are in a state of functional activity, and become, from the least irritation, the seat of active congestion.

For the purpose of facilitating description, we may divide the lymphatic glands into two sets, viz., those which are seated more or less directly under the skin, and those which are seated in the chest and abdomen. But it must not be forgotten that, in reference to the local state of the glands, to the predisposing cause, and to the essential points of the determining cause of the deposit or formation of tubercle, the two sets of glands are identical.

In order to give a clear idea of the characters of the subcutaneous glands when the seat of tubercle, I will briefly recapitulate the pathological causes of enlarged glands, and the mode of distinguishing glands enlarged from different pathological conditions from each other.

1st. The most healthy child who has impetigo of the hairy scalp—*i. e.* suppurative inflammation of the hair-follicles—will be certain to have enlargement of the glands to which the lymphatics from the inflamed follicles lead. The enlargement of the glands under these circumstances is probably the consequence of the passage into the gland of some irritating substance brought by the lymphatics from the inflamed follicle to the gland. The enlargement of the gland is the result of an excess of blood in it, the effusion of serosity, and the exudation of more or less lymph into it. If the source of the irritant, viz. the inflammation of the hair-follicle, be quickly cured, the lymphatic glands quickly resume their normal size; if the cure be long delayed, then the lymphatic gland remains permanently enlarged; if the primary mischief, the scalp disease, be severe, and the disease neglected, then suppuration of the lymphatic gland may be the consequence. If several glands be secondarily affected, then the glands nearest to the source of the irritant are first and most severely inflamed. I have illustrated what I desire to impress on you by reference to what takes place in suppurative inflammation of the hair-follicles; but the same consequence follows in the lymphatic glands whenever the *substance* of the true skin is inflamed. Primary inflammation of a lymphatic gland is in a child a rare disease; the cases I have seen might be counted by units. Inflammation of lymphatic glands secondary to distant mischief is one of the most common of diseases; the cases I have seen might be counted by thousands.

As to the diagnosis of glands enlarged from this cause:—

(*a*) The enlargement is limited to one set of glands; for example, in the case I have supposed, impetigo of the scalp, to the glands of the neck, and often to those of one part of the neck, as to those behind the sterno-cleido-mastoideus, when the occiput alone is the seat of the impetigo, or to those under the symphysis menti, when the impetigo is limited to the chin.

(*b*) In the earlier stage and in the severer form, the glands are soft and tender, and their outline not very sharply defined.

(*c*) The source of irritation may be found at the spot from whence the lymphatics leading to the gland arise.

(*d*) In the chronic stage, the nature of the enlargement is to be inferred, and only inferred, from the small number affected, their small size, their hardness, their moderate moveability,

(a) This Lecture was the second of a course, the first of which was published in the *Medical Times and Gazette* for July 6. Like that Lecture, the present is complete itself.

(b) The lymphatic glands are one organ when viewed with reference to their susceptibility to diseased actions.

their indolence, and duration without alteration, and now and then by the history. Lymphatic glands chronically enlarged, from the pressure of unabsorbed lymph in their substance, rarely, if ever, inflame again, and consequently, manifest no tendency to suppuration.

2nd. I have spoken of what takes place when a healthy child is the subject of inflammation, and especially suppurative inflammation, of the true cutis; but if the child, instead of being healthy, be strumous, then an amount of inflammation of the skin which would cause only the most trifling active congestion of the lymphatic glands to which the lymphatics of the inflamed part lead, would cause very great enlargement of the glands, and even suppurative inflammation.

But in the strumous child the lymphatic glands are generally more perceptible to touch, somewhat larger than are those of the healthy child. At the same time they are not hard, nor very sharply defined, nor particularly moveable, as when the seat of albuminoid infiltration. The whole of the glands are pretty equally affected. The enlargement is not limited to one set, but those of the neck, axillæ, groin, etc., are all in the condition described.

3rd. When the glands are the seat of albuminoid disease, they are very hard, sharply defined, and moveable. At the same time, though larger than natural, they never attain a really large size, are singularly indisposed to inflammation, and especially indisposed to suppurative inflammation. All the lymphatic glands are affected, and as a rule, pretty equally. In the neck, axillæ, and groins, we feel under the skin deep and superficial glands, like shots and peas.

4th. For the so-called hypertrophy of the lymphatic glands in leucocythemia the blood affords the diagnostic sign.

5th. The lymphatic glands of a child the subject of tuberculosis are not more perceptible to the touch (unless they themselves be the seat of some localised disease), than are the glands of a healthy child. But children the subject of tuberculosis are more disposed than are healthy, though less so than rickety children, to suffer from albuminoid infiltration of the lymphatic glands. So that a child being the subject of tuberculosis, we may find its lymphatic glands hard, moveable, and presenting the characters I just now described as evidencing the existence of this lesion.

Uninflamed lymphatic glands in which crude tubercles are present are large, hard, irregular in form, oval or round, but usully more or less uneven or nodular on the surface. It is rare for a single gland only to be diseased, usually several of the same set of glands suffer, and very commonly the corresponding set of glands on the two sides of the body; thus the chain of glands down the neck on both sides, or the glands in both groins. The lymphatic glands of the neck most commonly suffer, then those of the axillæ, and then those of the groins. While the glands on the two sides so commonly suffer at the same time, it is rare for them to suffer in an equal degree. There is no symmetry in the lesions, and in the same set or chain of glands we find some much more extensively affected than others, and supposing it to be the glands of the neck which are so diseased, there is no order in the degree of disease, that is to say, one or more glands in the uppermost part of the chain may be greatly diseased, then several scarcely at all, and then near the lower part of the chain one or more may be greatly diseased.

Sometimes there is a large mass, evidently made up of several enlarged glands, intimately united by condensed and thickened cellular tissue. We can only make out an imperfect division between the separate glands. The skin over the glands, while the tubercle is crude and the glands uninflamed, *i. e.*, in the state in which I have been describing them, is colourless, and not adherent to the mass. The part is free from pain and tenderness. In this stage of tuberculization of the exterior lymphatic glands, the diagnosis rests practically on their large size, and on the length of time they remain unchanged. I was about also to say, and on their chronic development, but in the lymphatic glands, as elsewhere, the formation of tubercle is favoured, not only by activity of the functions of the part, but also by active congestion; and, as a consequence of this, when a child who is the subject of tuberculosis has local disease of the skin or mucous membrane of the mouth or throat, of a nature to cause enlargement of the lymphatic glands to which the lymphatics from the inflamed part lead, that child is liable to have tubercle form in the glands which, in a healthy child under the conditions specified, would merely have serum and lymph exuded into them. So that whenever the lymphatic glands are greatly enlarged, even though it be acutely, and the primary mischief being cured, the lymphatic glands still continue unchanged in size, we may feel very sure, after some time has elapsed, that the glands have tuberculised.

Again, whenever a lymphatic gland has been enlarged for some time, and then spontaneously inflames, the skin over it becoming red and adherent, we may be confident that the cause of the inflammation is the presence of tubercle in the gland.

Wherever the characters I have mentioned are present, there can be no doubt about the nature of the disease; but now and then cases are met with in which the diagnosis is impossible. In these cases the amount of tubercle is very small, so that the gland is scarcely larger than in health; then the gland will be smooth on its surface, moveable, indolent, hard,—in fact, resemble a gland the seat of albuminoid infiltration, or a gland that was once in a state of active congestion, and the seat of exudation of lymph from distant local irritation.

In a doubtful case you attach much importance to the hereditary predisposition of the patient, and to the general characters of tuberculosis which may be present. The swellings in the neck of the girl who was here at my last Lecture presented most unmistakeable characters of being lymphatic glands the seat of tubercle; but had they been of more doubtful nature, the aspect of the girl, viz. that of strongly marked tuberculosis, would have given immense importance to the few characters of local deposit which might have been present.

Let me, before concluding this subject, recal to your minds the most common seats of primary inflammation leading to enlargement of superficial glands:—Active congestion, etc., of the glands under the rami of the jaw and symphysis menti is the consequence of inflammation of the true skin of the chin, lips, gums, and mucous membrane of the gums and mouth generally; early lancing the gums would save many a strumous child from sub-ramal glandular abscesses. Active congestion, etc., of the glands in front of the ear is the consequence of palpebral abscess—so-called stye,—or of infiltration of the cutis of forehead or anterior part of scalp; active congestion, etc., of the glands behind the angle of the jaw, to inflammation of the tonsils or parts in their vicinity; active congestion, etc., of the glands directly under the ear, to disease of the ear; active congestion, etc., of the glands down the neck anterior to the stomach, to disease of the pharynx and larynx and front of the scalp; active congestion, etc., of the glands posterior to the sterno-cleido-mastoideus, to disease of the occipital region of the scalp. With reference to the glands of the groin, I need only remind you that they are not uncommonly in a state of active congestion in the child in consequence of inflammation of the prepuce and glans penis in the male, and of the orifice of the vagina in the female.

There are some great facts I desire by all this to impress on the mind of the youngest of my hearers, viz.:—

1. That primary inflammation of the lymphatic glands is a very rare disease, even in scrofulous children.

2. That secondary inflammation of the superficial lymphatic glands is a very common disease.

3. That a superficial lymphatic gland being in a state of active congestion, by seeking out and treating the primary lesion, we can in all but every case prevent the occurrence of suppuration of the gland.

4. That when a superficial lymphatic gland inflames and suppurates without there being inflammation of the tissue from which the lymphatics to the gland lead, in almost all, if not in all cases, the gland so inflaming is the seat of the deposit of tubercle.

5. That the lymphatic glands of scrofulous children, and glands which contain tubercle inflame and suppurate from an amount of irritation which would merely lead to moderate active congestion of the glands in a child of healthy constitution.

Let us now consider the symptoms which indicate that the internal lymphatic glands are the seat of tubercle.

There are only two sets of internal glands which need occupy us, viz., the bronchial and the mesenteric. The symptoms which indicate that these glands are the seat of tubercle may be grouped under three heads:—

1st. The general symptoms which indicate that the patient

is the subject of tuberculosis. The symptoms are those I described to you in my first Lecture.

2nd. The symptoms which result from the direct interference with the special functions of the glands affected, consequent on the damage of their texture resulting from the presence of the tubercle in them, or partly from that and partly from the damage inflicted on the glands by the active congestion, effusion of serosity, and exudation of lymph, which preceded and accompany the formation of the tubercle in them.

Now, as the lymphatic glands in the bronchial and mesenteric groups are numerous, and as, although when one gland of the set is the seat of tubercle, many others are commonly the seat of the same product, yet we find that many of each set so commonly escape, that enough remain undamaged to perform the necessary functions of these glands, and that the symptoms derivable from this source, in the present state of our knowledge, are, for the purpose of diagnosis, altogether insignificant.

3rd. The local signs and the local symptoms connected directly with the presence of local lesion.

It is not many years since every child whose abdomen was larger than natural, or was supposed to be larger than natural, was commonly said to be the subject of mesenteric disease. A large abdomen at once called to mind disease of the mesenteric glands, and disease of the mesenteric glands signified tubercular deposit in the mesenteric glands. But, so far from tubercular disease of the mesenteric glands being the ordinary cause of a large abdomen in the child, it is very rarely the cause of it. It will be well for my younger hearers to recall to their minds the fact, that children under three years of age rarely have large deposits of tubercle in their mesenteric glands, while they very often have an exceedingly large abdomen.

In reference to the mesenteric glands, the only positive evidence that they are the seat of a deposit of tubercle is the detection by the hand of the large glands. When the mesenteric glands are the seat of a large deposit of tubercle they form a hard, nodular tumour about the umbilicus, which may be perceptible to touch. Sometimes the tumour is fixed, unable to be moved from side to side or from above downwards; sometimes a part of it, some nodules, are moveable; sometimes the whole can be moved a little.

To what other conditions can such a tumour be due?

1. Fæcal accumulations.

These are to be distinguished from tubercular mesenteric glands,

(*a*) By their seat. They usually occupy the transverse and descending colon.

(*b*) By their shape. They are usually long, their long axis being in the direction of the long axis of the bowel.

(*c*) By their odour. Retained fæces always, I believe, obtain a peculiar odour, and are accompanied by the frequent expulsion of flatus having the same stale stench.

(*d*) By their colour and consistence. The fæces that are passed have a peculiar appearance. They are pale, somewhat lumpy, and brittle, with a granular fracture.

But a knowledge of these points only guides to the idea that the tumour is formed of retained fæces. The test of the correctness of the idea is the effect of enemata. Aperient after aperient by the month may be given without removing the mass, when a single enema shall produce such an effect as to leave no doubt on the mind.

Suppose you desire to use an enema for the purpose of diagnosis in such a case. Strip the child, lie it on the bed, and examine the abdomen, carefully noting the size and position of the tumour or tumours. Then administer yourself, or see well administered, a large enema of soap and water with four ounces of olive oil and a tablespoonful of oil of turpentine. Let the oil and turpentine be mixed with eight ounces of soap water and thrown by a good syringe—not a bladder and pipe—into the bowels, and then as much soap and water be thrown up as the child will bear, the object being thoroughly to distend the bowel, stimulate it to contract, and excite peristaltic action far above the point to which your injection reaches.

When an injection is thrown into the bowel a griping pain is soon produced. The child must be quieted. The pain subsides, and then a large quantity—a pint or more—may be injected into the bowel of a child of four years old. Then follows a sense of distension, and you feel that the abdomen is distended. Now the child must be restrained for a few minutes from expelling the injection, the orifice of the rectum being compressed pretty firmly by a cloth. If the enema has been well given, the child will soon, however, have to be placed on the pan.

The contents of the pan, and especially the altered size, or loss of the tumour, renders the diagnosis certain. Remember, although not directly bearing on our especial subject, that fæces having once accumulated in quantity sufficient to produce a tumour in the abdomen of a child, are, unless great care be paid to the case, sure to accumulate again; so that if you direct an enema to be given, and do not see the child for some time after, you may find the tumour little changed.

2. Tubercle occasionally forms in quantity in the great omentum, and a tumour so constituted may easily be mistaken for a mass of tubercular mesenteric glands; as a rule it is less nodular, its edge is sharper, and it lies more superficially. Sometimes the diagnosis between the two is impossible, and the diagnosis is never of practical importance: a trial of skill, an interesting Medicl puzzle, and that is all.

As to other tumours that may be confounded with tubercular mesenteric glands, I am not practically acquainted with them. A case of cancer of the kidney was once mistaken for mesenteric disease, such could not have happened in any case of renal disease I have ever seen in a child or adult, and there is a case of disease of the pancreas on record in a child which *might* have been confounded with mesenteric disease, but was not. But tumour is not always perceptible. The tubercle in the glands may be small in quantity, or the glands affected widely separated, and so no tumour be there; or the state of the intestines may prevent the mass present being detected by touch. However, without there being a nodular mass in the umbilical region, we may sometimes feel by careful manipulation the tubercular glands, the parietes of the abdomen being thin and flaccid. The nodular *mass* is, as a rule, most easily and distinctly felt by direct compression from before backwards of the anterior abdominal wall; the *single* glands by grasping the abdominal wall between the fingers and thumb, or between the fingers of the two hands, and compressing it laterally; in this way I have repeatedly felt glands not larger than a small nut floating or moving with the movements of the mesentery.

As to the less constant signs and symptoms of tubercular mesenteric glands,—the abdomen may be of normal size; it may be, and very often is, retracted; now and then it is much distended. The direct cause of the distension is the accumulation of flatus in the intestines, due either to the generation of excess of flatus, or to the want of power to expel that generated.

Now, either the excessive formation or great accumulation may be, and frequently is, due to that condition of the mucous membrane of the intestine and especially of its glandular structures, which is the cause of the active congestion of the glands, that determines the deposit of the tubercle in the mesenteric glands. So that you will have gathered from what I have been telling you, that a large abdomen is by no means a necessary concomitant of mesenteric disease, and that when a large abdomen does accompany mesenteric disease, it is due not directly to the mesenteric disease, but commonly to the state of intestine which induces the mesenteric disease.

The nodular tumour from mesenteric disease is only to be detected by depressing the parietes, and when the nodular tumour is large, the abdomen is often small. There is another symptom frequently observed when tubercles are present in the mesenteric glands, and depending, like the large abdomen, on the determining cause of the deposit of tubercle; that symptom is diarrhœa. The diarrhœa, like the large abdomen, depends on the state of the mucous membrane of the intestines, loose stool and flatus going together. An uneasy sensation, or pain and tenderness of the abdomen, are both common concomitants of the disease of the abdominal lymphatic glands. These symptoms are due, usually at any rate, if not always, to inflammation of the serous membrane over the glands—now and then to the state of the small intestines. It is certainly very rare for the glands to be so large as to compress the vena cava and induce œdema of the lower extremities.

A little serosity is not uncommonly present in the peritoneal cavity when the mesenteric glands are filled with tubercle; it is the consequence of the state which causes the tenderness, viz. the inflammation of the serous membrane covering

the glands. We find after death in such cases increased vascularity of the serous membrane at the parts indicated.

When ascites is present, it is due either to compression of the vena portæ, by tubercular glands in the portal fissure, or to peritonitis.

Emaciation is a very common, but by no means a constant result of tubercular disease of the mesenteric glands. When the local disease is very extensive, it is generally present; but then you are to bear in mind that extensive tubercular disease of these glands is never present without tubercles forming in other parts. It is difficult to tell the parts played in producing the emaciation by the various organs damaged. Still, I am disposed to think from what I have seen, that when the great majority of the mesenteric glands are damaged from tubercular or albuminoid infiltration, that emaciation, and even extreme emaciation, is the necessary consequence.

Conjoined with tuberculization of the mesenteric glands we so often find tuberculization of the peritoneum, and so many of the symptoms of the latter have been attributed to the former, that now, it seems to me, is the best place for its consideration.

In acute general tuberculization the peritoneum often partakes of the process, and we find it studded more or less thickly with grey granulations remarkable for their small size and their transparency. No local symptoms indicate their existence. The child suffers from the symptoms which indicate general tuberculization, but we cannot tell in any special case whether the peritoneum is or is not thus affected. Chronic tuberculization of the peritoneum is generally accompanied by inflammation of the peritoneum; and tuberculization of the peritoneum, when accompanied by symptoms, is accompanied by the symptoms of chronic peritonitis.

The abdomen is distended and blown, and at the same time the abdominal muscles are tense, so that the abdomen is large and resistent. As the distension is due to the presence of air in the intestines, the abdomen is resonant. As the air in the intestines is partly the result of accumulation, and that accumulation is due to inflammation of the peritoneum, pain (colicy in character) and tenderness are present.

Emaciation, derangement of the digestive functions, constipation, and diarrhœa, now one, now the other, are additional symptoms. Adhesions take place as the disease progresses between the coils of intestines, and then a solid, massy sensation is conveyed to the hand on manipulating the abdomen; and as in these cases there is often here and there between the coils of intestines a little fluid, there is often more or less fluctuation.

There are, in many cases, a peculiar expression of face, a worn, anxious look, and a care in movement which are quite peculiar. Occasionally sudden shaking of the abdomen causes more pain than actual pressure. The consequence is that the child in moving briskly, and especially on descending stairs, etc., puts its hands on to its abdomen to stay its vibrations and to afford it some support.

The spleen is frequently at the same time as the peritoneum the seat of tubercles, and can be felt extending a little below the false ribs. The spleen enlarged from the presence of tubercles in its substance never attains the large size of the spleen the seat of albuminoid infiltration, its edge is less sharp, and adhesions generally unite its peritoneal covering to the parietal peritoneum, and in consequence it is less moveable than the albuminoid spleen.

The liver may be enlarged from fatty degeneration, as it is called, of its cells; and we often find scattered through it small grey tubercles, sometimes so transparent as to be easily overlooked.

The Bronchial Glands.—The general symptoms here also are, as in the other cases, those of tuberculosis.

If the tubercles be few they are unaccompanied by local signs. It is only when the glands, one or more, are stuffed with tubercle that we can ascertain their presence. The bronchial glands are situated chiefly about the bifurcation of the trachea, *i. e.* under the first bone of the sternum and a little below it. In the young, healthy child there is, from the presence of the remains of the thymus, a little want of resonance at this spot; when the bronchial glands are distended by tubercle the dulness is considerable and passes below the first bone of the sternum and is much greater than natural, laterally. It is only rarely that appreciable dulness is to be detected between the scapulæ, and after death we see why this should be so, for in the vast majority of cases the enlarged bronchial glands are covered posteriorly by a considerable thickness of lung.

As the bronchial glands accompany the bronchial tubes, it is usual to have on one or the other side some masses of glands extend under the anterior margin of the lungs, and therefore it is common to have a cracked pot sound on percussing the cartilages of the upper three ribs on one or both sides. The air-containing lung is compressed during percussion between the solid mass of glands behind and the in-driven parietes in front; in this way the air is forced out suddenly from the healthy piece of lung, and the chinking sound is produced.

In the healthy child the breath sounds have the bronchial character over the first bone of the sternum. When the bronchial glands are stuffed with tubercle, the breathing is more tubular than in health, and preserves that character almost to the base of the heart. It has sometimes the same character between the scapulæ. The large hard glands not unfrequently compress the descending vena cava and produce a permanent venous hum audible over the course of the vessel; they may also compress the pulmonary artery and produce a systolic murmur having its point of greatest intensity at the second left interspace.

The veins of the neck are often greatly distended, the distension being extreme during coughing. Slight œdema of the face and upper extremity is sometimes a consequence of this impediment to the return of blood from the superior vena cava; epistaxis, and even hæmorrhage into the arachnoid, have resulted from the same cause. I have seen hydrothorax from compression of the vena azygos. I never saw dysphagia from compression of the œsophagus by tubercular glands in the child, but I have read of it. The bronchial tubes may be narrowed by the pressure of the glands, and impediment to the entrance of air into the lungs be the consequence; hence will follow still greater atrophy of the lung than is proper to the patient from the tuberculosis. Cough is excited, and from this follows emphysema of the least supported and least compressed parts of the lungs. The nerves are irritated, continuous spasm may be the result; whispering voice, cough in successions, as in hooping-cough, and even permanent, long, noisy inspirations, such as occur in hooping-cough and in laryngismus stridulus.

Time does not permit me more than very briefly to refer to the terminations of these affections, a subject scarcely within the scope of these Lectures. In the superficial glands the grey tubercles, which are very common, either become obsolescent, or they pass into the stage of yellow tubercle, soften, and are evacuated by suppuration. Tubercles in this situation easily calcify.

When tubercles form in the mesenteric glands, death most commonly occurs while they are in the unsoftened yellow stage. Now and then the tubercles do not pass beyond the grey stage, the grey tubercles becoming obsolescent and the patient recovering. Not uncommonly, and that even when the quantity of tubercle in the mesenteric glands is large, it calcifies, and the patient recovers. Sometimes after death softened yellow tubercle is found in some of the glands, and crude yellow tubercle in others.

In the bronchial glands obsolescence and calcification are extremely common terminations of tubercle. In comparatively rare cases softened tubercle is eliminated through an opening into a bronchial tube, and a cavity formed. Calcified tubercle may be eliminated through a communication between the gland and one of the air-passages, usually (as Carswell has figured) near to the bifurcation of the trachea.

Tubercular peritonitis seldom ends favourably. When this does occur, adhesions form between the coils of intestines and the parietal peritoneum; the grey granulations become obsolescent, the masses of tubercle calcify.

King and Queen's College of Physicians in Ireland.—At the annual meeting, held on St. Luke's-day, Friday, October 18, the following officers were elected for the ensuing year:—*President*, Dr. Corrigan; *Vice-President*, Dr. Aquilla Smith; *Censors*, Drs. Aquilla Smith, Duncan, Ringland, and Moore; *Treasurer*, Dr. Dwyer; *Registrar*, Dr. Atthill; *Examiners in Midwifery*, Drs. E. B. Sinclair and W. B. Jennings; *Inspectors of Apothecaries' Shops*, Drs. Macready, Travers, H. Kennedy, and Jennings.

ORIGINAL COMMUNICATIONS.

ON THE IMMEDIATE TREATMENT OF STRICTURE OF THE URETHRA.

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(Continued from page 400.)

Case 5.—Stricture of Eighteen Years' Duration in Front of the Triangular Ligament—Several Attacks of Retention—Infiltration and Abscess at the Root of the Penis—Operation—Subsequent Sloughing—Recovery after the Use of the Dilator.

J. R., a man of sallow aspect, was admitted under my care for stricture. For eighteen years he has been the subject of stricture, during which period he has had several attacks of retention of urine, which for some months has been passed guttatim, and occasionally in the smallest stream. A week prior to his admission, during a violent effort to relieve himself, he felt a sharp burning pain at the root of the penis, with slight relief to his urgency, but no urine escaped *per urethram*. In the evening he had a distinct rigor, was feverish, and passed a restless night; and on the following morning noticed the penis was swollen, of a dusky hue, and painful to the touch; his urine continued to escape in drops. The penis was fomented with warm water; but all his symptoms increasing in severity, at the expiration of a week he was admitted into the Hospital. I detected infiltration of urine, and an abscess at the root of the penis, which was immediately opened; and, to prevent further infiltration, and afford a free outlet for the urine, an incision was made into the urethra in the perinæum, posterior to the stricture, by thrusting in a sharp-pointed bistoury in front of the anus, with the back to the rectum, and cutting upwards and forwards during the straining of the patient. The urethra being opened, a gum elastic catheter was pushed through the wound into the bladder, and the urine thus permitted to escape. The catheter was firmly secured, and a poultice applied to the wound. In the course of a few days the inflammation and swelling of the penis had subsided sufficiently to allow a No. 1 to be tried through the penis, but it was found impracticable to reach the bladder. Upon a second attempt, the catheter went farther, but would not penetrate the entire canal; the third attempt was more successful, and after considerable difficulty, the bladder was reached, and the urine withdrawn. The catheter was allowed to remain until the following morning, when it was replaced by the dilator, and the stricture at once split by passing a No. 12 tube. My usual plan of treatment was adopted, and the urine withdrawn. On the following day the patient expressed himself as having passed a tranquil night, without rigors, or even chilliness; the urine flowed in a moderate stream, and with but slight scalding.

On the third day from the operation, a No. 12 catheter was passed without difficulty, and this act was repeated on alternate days for a fortnight; the intervals were then gradually extended, and in six weeks from the operation, the perinæal opening having healed, he left the Hospital, passing his own instrument, and making water in a full stream.

The above-recited case afforded another opportunity of testing the efficiency of the treatment, and although undertaken at a time when the patient was hardly recovered from the effects of infiltration, it was attended with signal success; he never had a bad symptom, and in six weeks left the Hospital, so far cured that the stricture was entirely under his own control.

Case 6.—Stricture of Thirty Years' Standing—Fistulæ in Perinæo—Incontinence of Urine—Temporary Impermeability of Urethra—Subsequent Treatment by Small and Large Dilators—Recovery.

J. R., aged 62, a well-formed and ordinarily robust man, but now greatly emaciated, was admitted in 1857 under my care. He states he has been the subject of stricture thirty years, and dates the origination of the disease to frequently-contracted gonorrhœa. Fifteen years since he was the subject of retention of urine, which was at that time relieved by the introduction of a very small catheter, but being unable to continue in the Hospital where he obtained relief, the contraction speedily became worse, and an abscess subsequently formed in the perinæum, which, upon being opened, gave vent to pus and urine, the latter continuing to escape more freely through the perineal opening than through the urethra. He now became an inmate of a Provincial Hospital, where every endeavour was made to get an instrument into the bladder without success, and he eventually left unrelieved, the urine continuing to dribble away, partly from the urethra and partly through the perinæal opening, so that he was compelled to wear an apparatus specially made for the purpose of hindering the urine from saturating his clothes. No treatment having hitherto been of service, he came to London, and placed himself under the care of the late Mr. Charles Guthrie, who eventually requested me to admit him under my care. Upon examination I found his statement was true, and that the urine continually escaped. A No. 1 catheter was attempted, but it was impossible to pass it beyond the membranous portion of the urethra, which appeared to be so far encroached upon as almost to amount to obliteration. Various attempts were made from time to time without success, and he was, consequently, placed under the influence of chloroform, and a No. 1 catheter was forcibly passed into the bladder. This was permitted to remain, and on the following day was replaced by a gum elastic one. The patient did not suffer materially from the forced catheterism, but was relieved by the withdrawal of a large quantity of urine, and in three days after passing the No. 1 silver catheter, I was enabled to introduce the dilator, and split the stricture. The patient was then placed in bed, and the mixture of quinine and opium ordered. In the evening he was attacked with rigors, and experienced considerable scalding in passing his water, which he continued to do in a narrow stream, and in small quantities. On the day following he was better, but the urine did not run freely, and on the second day after the operation the No. 12 catheter was with some little difficulty propelled into the bladder. A less quantity of urine escaped, and upon this occasion the catheter was allowed to remain five minutes and withdrawn. The same line of treatment was adopted for many consecutive days, but with a No. 11 instead of a No. 12 catheter, the stricture being irritable, and not admitting the larger size. A No. 12 was, however, eventually passed, and being taught to use the catheter for himself, the man returned to the country, making water in a full stream, and declaring himself perfectly cured. This patient was under treatment nine weeks.

Three cases of a precisely similar character have been under treatment, where incontinence of urine was persistent, although the bladder remained more or less full, the patient suffering from the absorption of the deleterious properties of the retained urine, the effects of which were recognised by drowsiness, pallor, nervousness, and tingling or itching of the skin. In each case the patient had been subjected to the same treatment, and with similar success.

Case 7.—Traumatic Stricture—Severe Hæmorrhage—Elastic and Recurrent, after Dilatation—Operation—Recovery.

J. H., aged 48, a master builder, consulted me in June, 1860, in consequence of continued difficulty in passing his water. He stated that five years since, while walking along a roof, he suddenly fell across a beam. His perineum was seriously bruised, and he experienced great pain in the urethra, from which a considerable quantity of blood escaped. He was taken home, and a Surgeon passed with some difficulty a gum elastic catheter, which was retained. The hæmorrhage gradually subsided, and the catheter was removed. He, however, soon became aware that his urine was passed with greater difficulty than formerly, and that he was compelled to strain a good deal to get rid of the contents of the bladder. He again consulted a Surgeon, who passed a No. 2 catheter into the bladder, and gradually increased the sizes of his instrument until a No. 12 was attained to. The catheterism being discontinued, the stricture soon returned, and he again consulted the same gentleman, who recommenced the treatment, and soon arrived at No. 12. The convalescence was, however, of short duration, for upon the treatment being discontinued the contraction speedily recurred. Upon examination I found no difficulty in passing No. 2, but the stricture would not admit a No. 4, and No. 3 was very tight. I therefore immediately pushed in the dilator, split the stricture, and afterwards passed a No. 12

with facility. This treatment was perfectly successful. There was never the least hesitation in introducing a No. 12 afterwards, and he continued to eject his water in a copious stream without straining and at the ordinary periods.

Case 8.—*Stricture of Eight Years' Duration—Difficult Micturition—Occasional Retention of Urine—No Complications.*

W. B., aged 50, a clerk in a Government office, was in 1858 sent to me by Mr. Jones, of Bennington, in consequence of stricture of the urethra, attended with a continual difficulty in micturition and complete retention of urine after any excess. At the time of my seeing him he was suffering from retention, which was immediately relieved by the introduction of a No. 2 catheter. Although there was no special difficulty upon a subsequent occasion in introducing a No. 3, yet as it was very tight, and in order to relieve him from his often recurrent retentions, I advised the stricture should be split. The patient consented. The dilator was introduced, and the stricture immediately split. He was not subjected to the influence of chloroform. The pain was trifling, and after the operation he walked home. Such after treatment was adopted as has been already described, and he occasionally presents himself to his Surgeon, when a large-sized catheter can be passed with ease.

Case 9.—In June, 1859, I was consulted by a gentleman who had come from Paris for the purpose of having his stricture split. He had for many years suffered from this complaint, which had latterly become so aggravated that his urine would only pass in the smallest stream, and occasionally by drops. Upon his first consulting me various catheters were tried without success. Nothing would penetrate the stricture, the point of the instrument becoming entangled in what he described as an old false passage. He was desired to remain perfectly quiet; to take castor-oil every other morning, have warm baths, and renew his visit in a week. Upon the second trial, and after very considerable difficulty, I was enabled to pass No. 1 into the bladder. A considerable quantity of urine was withdrawn, with great relief. He was recommended to remain quiet, and to come again in three days, when another attempt was made with the No. 1 that had passed before, but without success. A week was, therefore, permitted to elapse before any further trial, when, after continued perseverance, I succeeded with a No. 1, which was allowed to remain for an hour, and was then replaced by No. 2. In the evening he had retention, but it was speedily relieved by the No. 1 catheter. He continued to attend every third day until No. 2 could be passed with some degree of facility, when the dilator was introduced and the stricture split, and No. 12 catheter immediately introduced: the urine flowed through; and he walked home, having directions to remain quiet, and take the quinine and opium mixture.

On the second day from the operation a No. 12 was freely slipped into the bladder; he had had neither hæmorrhage nor shivering, and the utmost he complained of was a slight scalding. In ten days from the operation this gentleman passed his own instrument, and in a fortnight returned to Paris, making water with ease, and using No. 12 without the least difficulty.

I saw this patient at the beginning of the present year. The No. 12 can now be passed with the greatest facility. He has never had either retention or difficulty since the operation, and may be considered well. The cases which have been already described are selected as representing the most severe forms of stricture, and as being attended by complications, which would materially militate against any ordinary operation, and must have necessitated months of Surgical attendance if the dilating plan had been selected.

In every one of the recited cases the treatment was successful, and with but a little instruction the patients were enabled to maintain the after control of the bladder, by occasionally passing a bougie. Although this treatment is specially advocated in the extreme forms of the disease, it is equally applicable in the milder or less complicated, more especially in cases where strictures are irritable, and unyielding, and where catheterism is attended with difficulty and severe suffering.

In such instances the dilator gives immediate relief, and experience has proved that by splitting the stricture, tension is immediately overcome, and the passage of the catheter is made so facile as to be deprived of any but the most trifling pain. The following cases will best illustrate this:—

J. R., aged 38, a barrister, consulted me in January 1859, complaining of stricture of the urethra, from which he had suffered for the last eight years. He stated that he had had three attacks of gonorrhœa, the discharge accompanying each attack lingering for a considerable period, and necessitating the use of stimulating injections for its cure. During 1858 his symptoms became much aggravated, he was obliged to strain greatly to get rid of the contents of his bladder, the stream of urine which had become spiral, and occasionally forked, was very small, and his sufferings were further aggravated by the protrusion of piles during his efforts for relief, and retention of urine, which upon one occasion followed a debauch, and on another resulted from inability to relieve himself during a railway journey.

Upon examination, I detected a stricture situated about the membranous portion of the urethra, through which a No. 2 catheter, could without material difficulty be passed. The stricture was of short extent, apparently cartilaginous, and it grasped the catheter tightly. Having explained to the patient the *rationale* of the operation, he at once consented. The dilator was, therefore, immediately introduced, the stricture split, and a No. 12 catheter substituted for the purpose of withdrawing the contents of the bladder. There was the slightest possible bleeding, and he stated the operation was not more severe than passing a catheter. I directed him to remain at home during the afternoon, and to take the quinine and opium mixture.

This gentleman continued his attendance on alternate days for a fortnight, he never had the slightest difficulty in passing his water, the pain was very trifling, and a No. 12 catheter slipped into the bladder with the greatest ease. Being now taught to pass his own instrument, he was discharged cured.

J. J., aged 61, a gentleman, residing in Wales, consulted me in December 1858, for stricture of many years' duration. He stated that during the previous year, the stream of urine had become materially decreased in size, that he was obliged to pass water every two hours, that the urine was highly ammoniacal and loaded with mucus, that the irritable state of his bladder compelled him to make water the instant he had the desire to do so; and that his clothes were constantly wetted, from his inability to eject the urine in a continuous stream. His rest was broken, and his health materially damaged, by the absorption of the noxious properties of the retained urine. Upon examination, I detected a stricture at the triangular ligament, which would only admit a No. 1 catheter. The obstruction was dense and unyielding, and about half an inch in length. As the patient was somewhat plethoric, I prescribed a purgative, and requested his attendance on the following day, at which visit the dilator was with slight difficulty introduced, and the stricture split. A No. 12 catheter was now substituted for the dilator, and the urine withdrawn. In this case as in the former one, the cure was uninterrupted by a single unfavourable symptom, the patient was merely confined to the house one afternoon, and the same plan of after treatment having been carried out, he at the end of a fortnight, returned to Wales, capable of passing his own catheter.

I have had several letters from this gentleman since, in all of which he declares himself free from the slightest difficulty in passing his water or introducing his catheter.

The foregoing cases have been briefly described, and no allusion or comparison has been made to the various kinds of treatment already published. Their perusal must have satisfied the most sceptical that in every instance where any kind of instrument can be passed into the bladder the urethra may, by the mechanical effect of the dilator, be immediately enlarged to its natural size; and that while in slight cases this enlargement is effected without suffering, or even the inhalation of chloroform, in the more severe forms that agent facilitates the operation and secures a perfect immunity from pain. It is quite true that if the after-treatment is not attended to the stricture will sooner or later recur, but as the patient by passing his own instrument has the control of the bladder it can only return as a consequence of culpable neglect. The immunity from accidents having been already

proved, the Surgeon need have no fear of those serious results which so frequently accompany any cutting operation, and it is no less extraordinary than true that whereas rigors ordinarily supervene after rapid dilatation, they form the exception where the stricture has been fairly split.

The method of performing this operation may be described in a very few words. The permeability of the canal having been once satisfactorily ascertained, the size of the meatus of the urethra is to be gauged by passing into it a sound that will conveniently fit, and the number of the sound so used is to be the number of the tube to be passed: this is important to ascertain, so that the urethra may not be stretched beyond its natural limits, for while the urethra of one person will admit a No. 14, another will not admit more than No. 9.

The dilator having been previously well oiled, is to be introduced with the handle somewhat over the patient's left hip, and by keeping the convex portion gently pressing against the under part of the urethra, the point will glide along the upper portion until it is fairly beyond the triangular ligament, when, by bringing the handle to a right angle with the body, and gradually depressing it—but not so much as in the passage of an ordinary catheter—it will usually slip into the bladder; in fact, the same proceeding is to be adopted as in introducing a lithotrite for the purpose of crushing a calculus. Having reached the bladder, the dilator should be gently rotated, to prove that it is fairly within that viscus, and being thus assured, the Surgeon is now to place the point of the tube he had previously selected, upon the wire between the blades, and thrust it quickly onwards to the end. The stricture being now fairly split, the dilator should be rotated to still further separate the tops of the rent, and be then withdrawn. A catheter corresponding to the number of the tube being substituted for the purpose of removing the urine. The catheter is now to be taken out, and the patient sent to bed, with directions to take, every four hours, for the first day and night, a mixture containing in each dose two grains of quinine and ten minims of the tincture of opium. The facility with which this proceeding can be effected will of course depend upon the kind and number of the strictures, and the existence or otherwise of false passages or fistulæ in perinæo. The urine being withdrawn, the patient does not require to pass water for some hours, and when compelled to do so, the stream is usually larger, and the urine passes with greater facility than before. On the second day from the operation the same catheter should be gently introduced; but if the patient complains of much scalding, it will be better to take one size less. This should be repeated every other day for a week, when the larger one may be substituted, and the patient be taught to pass his own instrument. Of course the time occupied in the after treatment must vary with the nature of the case, and in the more obstinate forms necessitates the employment of the catheter for some time, the intervals being gradually increased until it is not required to be used more than once in three, four, or six months, and in most instances not more frequently than once a year. The bowels should be relieved by a dose of castor-oil taken early on the morning of the operation, and the patient should be directed not to pass water for two or three hours previously, in order, 1st, to facilitate the introduction of the dilator, and 2nd, to permit its free movement in the bladder.

Out of so large a number of cases in which this instrument has been employed, instances have occasionally occurred where the after treatment has been greatly neglected, and the patients have presented themselves again. In these cases it has always been found that the calibre of the urethra may soon be restored by the dilating power of the instrument, without again resorting to splitting, the uniting medium yielding much more easily than the structures which formed the original stricture.

In conclusion, it may be stated that the Dilator is not only capable of splitting a stricture, but it affords the most effectual means of dilating it to any extent that may seem advisable to a prudent Surgeon. All practical Surgeons know the difficulty of passing a second catheter through a difficult stricture. This is entirely obviated by the use of the dilator, which, being once introduced, is capable of either dilating the obstruction by the employment of a succession of tubes, or splitting the stricture by the passage of the largest tube at once.

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HOLIDAY NOTES ON SOME CONTINENTAL SPAS.—VICHY.

By HERMANN WEBER, M.D., F.R.C.P.
Physician to the German Hospital.

(Continued from page 401.)

The morbid conditions most frequently relieved by the Vichy waters are—1. Disorders of the stomach, of a non-inflammatory character, as simple dyspepsia, characterised by slowness of digestion, depression after meals, inclination to heart-burn, giddiness, want of appetite, and constipation. The disorders connected with frequent or constant gastralgia require great care in the use of these waters, and are, in general, better without them. 2. Affections of the liver furnish a great contingent to the visitors of Vichy. Simple enlargements of the liver, in consequence of continued congestion, as found in invalids returning from hot climates, are certainly benefitted by the waters of Vichy; but some of them yield more rapidly to the Carlsbad waters. Malignant affections of the liver, it need scarcely be mentioned, are improper cases for either of the two places. Gall-stones are said to be frequently removed by the waters, and the recurrence of them prevented; the secretion of the bile becoming, it is stated, more fluid; but whether this greater fluidity is proved by experiment, I am unable to say. In this respect, again, Carlsbad claims, if not a superiority, at all events, an equal rank with Vichy.

The uric acid diathesis is checked with a great degree of certainty by the Vichy waters, and the good effect is, in most cases, not confined to the few weeks during which the waters are taken, but continues beyond that. Yet it will, in most persons, be advisable to alter the manner of living under which the diathesis has originated, and in some to take occasionally a course of the waters at home. We can scarcely consider even this action of the waters as a mere solution, otherwise their effects would not last so long beyond the time of their actual presence in the body, but we must regard it as an alteration in the assimilation of food and the metamorphosis of matter.

Dr. Willemin has kindly communicated to me the results of his researches on the urine of patients affected with the uric acid diathesis. He has constantly found that at about the end of eight days from the commencement of the use of the Vichy waters, the urine of such patients contains large quantities of urate of soda, instead of uric acid, that the passage of this more soluble salt continues for six days and more, sometimes to the end of the cure. In this manner, viz., through the formation of a more soluble salt, Dr. Willemin concludes the uric acid is easily drained off from the kidneys.

Diabetes is another disease in which the Physicians, both of Vichy and of Carlsbad, have met with perfect cures; they confess, however, that they have seen many cases in which the complaint remained unchanged. Our knowledge of the pathology of diabetes is still so imperfect, that we must take the cases of "cures" with a certain degree of reserve. There are cases of diabetes of a transitory nature, brought on by mental anxiety, by various derangements of the nervous system, or by carbuncle. I, myself, have seen three such cases, which I have been able to watch from the very commencement to the termination in health; in all three cases the Vichy waters were prescribed, and certainly the liberal use of them has given great relief to the burning thirst. The waters of Ems we know have a very similar effect, and, according to accessory conditions, those of Carlsbad also. We are, as yet, however, uncertain whether such cures would not have been effected without these waters, after the removal of the exciting cause. We have seen other cases of confirmed and long standing diabetes, in which during a stay at Vichy and also at Carlsbad, the weight of the body had increased, the strength had returned, and all the distressing symptoms had disappeared, while the quantity of sugar passing with the urine, had undergone scarcely any alteration. In other cases there was a diminution and general improvement, but not a disappearance of sugar, and again in some others, no benefit had accrued from the use of the waters.

Dr. Willemin, the same intelligent Physician at Vichy whom I have already mentioned, has summed up his experience on this subject in the following manner:—

"By the use of the Vichy waters the sugar disappears in very recent cases, soon, from the urine. If the disease is more intense, the sugar generally diminishes at the end of a few days, and at last disappears likewise entirely. If, however, the constitution has become already changed, if a serious affection of the lungs or digestive organs has already manifested itself, the Vichy waters have no curative influence."

These four pathological conditions, viz. simple dyspepsia, gall stones, uric acid diathesis, and diabetes appear to us as those most influenced by the Vichy waters, and these four conditions are also, no doubt, intimately related to each other. In several individuals I have observed them making their appearance, in the course of years, in the succession mentioned. Again, I have seen the same persons at times affected with the one, at times with the other.

Another morbid condition for which Vichy is often used is gout,—again, a diseases of mal-assimilation with retarded metamorphosis of matter. Cases of chronic gout and of rheumatic gout, with stiffness of the joints, are those best suited; the cases in which frequent acute attacks occur, are often not benefited, nor are those to be sent to Vichy who suffer from anomalous gout, with affection of internal organs. It seems an experience frequently made that the waters of Vichy remarkably diminish the rigidity of the joints and ligaments; here again the arsenic contained in the Vichy waters plays probably an active part; arsenic at all events, has great power in removing the stiffness of joints caused by rheumatic gout.

The Physicians at Vichy appear not to place much value on the effects of their waters on chronic catarrh of the air-passages, while the Physicians at Ems and Neuenahr consider their springs as highly useful in these complaints. I certainly have seen many cases of chronic cough with profuse expectoration accompanied, and to some degree caused, by derangements of the digestive organs—cases which used to be called "stomach cough,"—in which the carbonated alkaline waters of Ems and Neuenahr have had a very beneficial influence; though in cases of several year's standing where the mucous membrane is much altered, or where there is a considerable degree of emphysema, a complete cure cannot be thought of.

Dr. Willemin published a monograph in 1857 "On the Employment of the Vichy Waters in Chronic Affections of the Uterus;" the result of his experience is that the Vichy waters, used in the form of baths and of "irrigations" while in the bath (injections and ascending douches), are very beneficial in cases of engorgements of the womb consequent on difficult labours and miscarriages, as soon as the inflammatory action has completely ceased. He found these means useful as well in those cases which were complicated with excoriations and ulcerations of the os uteri and leucorrhœa, as also in those without these complications. He has also related some cases of fluxion of the womb (*fluxion de l'uterus*) in connexion with sterility, in which the uterine affection disappeared, and the patients at the same time ceased to be sterile.

The manner of living at Vichy is about this:—You rise between half-past four and half-past six, proceed to the spring assigned by the Medical adviser, take at first only two glasses of about five ounces each, with an interval of from fifteen to twenty-five minutes; you increase this quantity during the following days to three and four glasses, rarely to more than five. The time between drinking each glass is occupied by gentle exercise in the shady park adjoining the thermal establishment, or, if it rains, in the thermal establishment itself; if the exercise is too fatiguing, the patient may sit in the open air or may even drink the water while in bed. The bath is taken most advantageously soon after the drinking is finished, viz., before breakfast. At ten o'clock all the bells of the hotels invite you to breakfast, or as it is also called, "the first table d'hôte," which consists of a great variety of things, as tea or coffee, with milk, bread and butter, various kinds of cold and warm meat, fowl, fish, ham, eggs, omelettes, cakes, pastry, stewed fruit, light French wine, etc. It is easily understood that patients under such temptation, take frequently far too much, and often also indigestible articles of food, yet, in general, living the greater part of the day in the air, they bear it well. It is, however, certain that pastry, all rich dishes, fried fish, salad, and raw fruit ought to be avoided, and wine ought to be taken sparingly. After breakfast some walk, some take a drive in the neighbourhood, some read, some play at cards in the open air. At about three or four o'clock the majority of the visitors again drink two or three glasses of the water with gentle exercise between and after them, and five o'clock is the hour for the second table d'hôte, which is again a sumptuous meal, the majority of the dishes being, it must be owned, wholesome, and well prepared, though there are always some which might be avoided. Almost everybody takes the light French wine with water. After dinner some stroll out on foot, some take a drive, or ride on donkeys. At about eight o'clock it is usual to take a cup of coffee or tea which seem both impregnated with the mineral waters, and between nine and ten the majority retire to rest.

The Medical men are Dr. Alquié, the Inspector of the baths, Drs. Dubois and Willemin, the Deputy-inspectors (the latter of whom speaks English well) Drs. Barthez, Bourdier, Chambard, Chopard, Collas, Cornil, Durand-Fardel, and Gouttebessis.

The accommodation in the hotels is good, and the prices are not immoderate; in the first class hotels, as Hotel Guillermen, where the English in general reside, or Hotel de Paris, you pay 10s. to 12s. per day for apartments and board included; in the good second class hotels, as in Hotel Richelieu, the price is from 7s. to 8s., there being many besides with even more moderate terms; there are also a few furnished houses, as Châlet Prin (grand et petit).

The waters of Vichy belong to Government, and are farmed by a Company, which has a branch establishment for the sale of the natural Vichy waters at Margaret-street Cavendish-square.

There is a small separate establishment at Cusset, two miles from Vichy. The springs are less warm than those of Vichy, otherwise their constituents are nearly the same.

(To be continued.)

AN EXPERIMENTAL INQUIRY INTO THE VALUE OF INCISION OF THE CILIARY MUSCLE,

IN THE TREATMENT OF CERTAIN DISEASES OF THE EYE AND DISORDERS OF ITS ACCOMMODATION.

By JAMES VOSE SOLOMON, F.R.C.S.
Surgeon to the Birmingham and Midland Eye Institution.

Myopia. (a)

(Continued from page 327.)

Case 21.—(*Case* 10 *of Myopia*)—*Acquired Myopia—Intraocular Myopia, after which the Accommodation for Reading and for Features was much augmented.*

H. J., a steam carpet weaver, aged 28, residing at Kidderminster, came under the care of Mr. Solomon on August 28, 1860. He stated he had been annoyed for the last twelve months by a constant dimness before his eyes, which interfered with his work, and caused him to apply for Medical relief. The flame of a gas light appears to be extended half-a-yard. There are no flashes in the dark. The pupils are moderately active, and the globes rather more tense than normal.

The far point for the distinct vision of brevier type is nine inches, and for the features of another person two yards and a half. Concave glasses afford considerable relief.

Ophthalmoscopic Examination.—The retinal vessels are small, and deficient in the number of their branches, and the optic discs were much blanched (the irides are brown). The right choroid is pale; the circulation in the

(a) The term "near point" when used in these papers is meant to denote the nearest point from the anterior surface of the lens at which the patient can see with distinctness. It does not mean the nearest point at which he sees with *comfort*.

The "far point," whether used in reference to type or features, also implies that those objects present a clear outline.

The purport of my inquiry was, in the first instance, purely utilitarian, therefore I adopted the same objects as tests which a short-sighted person makes use of when he applies to an optician for spectacles. He selects a pair of glasses for reading pica type, and another for recognising the features of persons across the street.

Dr. Donders tests the degree of myopia present somewhat differently, but then his object is to learn what strength of spectacles is required, while mine has been to ascertain what amount of advantage and comfort can be afforded to a myopic *without* imposing upon him the trouble, disagreeableness, and disfigurement of carrying an iron bridge upon his nose, and a pair of windows in front of his eyes.

left is vigorous, and the retinal vessels of this eye are the more numerous. In both the retinal veins are very dark, and stand out in relief to the arteries; the main trunks of the former present a rugged outline.

Treatment.—Iron and quinine were administered internally and a prussic acid lotion was used as an eye-water. From this treatment, continued for a month, in conjunction with perfect rest of the eyes, the following result was obtained:—The gas light is no longer distorted; the far point for features is doubled, viz. five yards. The reading distance remains as on admission.

Operation, September 23.—Intraocular myotomy of both eyes.

October 23.—The far point for features was quadrupled, viz. twenty yards.

December 18.—The far point for features is thirty yards, and for small type twenty-eight inches.

January 8, 1861.—The improvement as last reported is maintained. A church clock is well seen at 400 yards.

June 11.—The near point for small pica is four inches, the far point is 28 inches. The far point for features and a church clock remain as last reported.

Ophthalmoscopic Examination.—There is no evidence of posterior staphyloma, or of atrophy of the choroid. The choroidal circulation is improved, and that of the retina, if anything, is rather better.

Résumé.—Acquired myopia of one year's duration. The far point for reading increased, by operation, from nine to eighteen inches, and for features from five yards to thirty. The near point for reading is four inches. Date of operation, September 23, 1860. The last observation was made about eight months and a-half afterwards, viz., on June 11, 1861.(b)

Case 22.—(*Case* 11 *of Myopia*)—*Congenital Myopia—Large Posterior Staphyloma in each Eye—Cicatrices* (?) *in left Choroid—Intraocular Myotomy—The Far Point for Features increased from One Yard and a-half to Thirty-six Yards, and the Near Point for Pica from One Inch to Four.*

J. M., aged 11, from Dudley, came under Mr. Solomon's care on April 5, 1861. The far point for small pica was at this date three inches, and for features one yard and-half. The myopia is attributed to a fall which occurred five or six years ago and caused a severe wound on the forehead over the left brow, from which a cicatrix of an inch and a half in length remains. The eyes are brown, large, and subject to a slight convergent squint, which ceases when the object looked at is removed to a distance of three feet from the patient. The vision and range of accommodation is the same in both eyes.

Ophthalmoscopic Examination.—There is a large posterior staphyloma on the outer side of each optic nerve-entrance, and a large, well-defined streak of pigment of semilunar shape intervenes between the inner margin of the "crescent" and the optic disc. The retinal vessels emerge from the inner or nasal rim of a well-defined circle which includes the disc and staphyloma. In the space betweeen the pigment crescent and the outermost margin of the staphyloma are several small vascular patches. These are not, I am satisfied, from repeated examinations, hæmorrhagic spots. The venous system of the retina is in both eyes much gorged, and the blood of a chocolate colour. In the choroid on the same side (left) as the cicatrix on the forehead are four cicatrices (?); they are perfectly white and of semilunar shape. One is placed perpendicularly and on the inner side of the retinal vessels; the other three are placed horizontally and beneath the one first described. In the right choroid are several abnormal masses of pigment. The yellow spot is very distinct in both eyes.

Treatment.—As the patient was reported to have recently passed a large round worm, the treatment was commenced by the administration of anthelmintics, which included the oil of male fern, followed by iron and quinine. No worm was discovered, and no change took place in the accommodation of the eyes.

Operation, May 4. — Intraocular myotomy of the *right* eye, and subconjunctival division of the *left* inner rectus tendon.

28th.—The far point for small-pica is six and a-half inches, and for features nine feet.

29th.—Intraocular myotomy was performed on the left eye, and, as the convergent squint had returned, the right rectus tendon was divided.

June 5 and 21.—The near point for reading is one inch, the far point six and a-half inches. The far point for features is thirty-six yards. The boy states that he now sees houses and trees at a very great distance. In the left eye the circulation in the retina is much improved, the arterial branches appear more numerous, and the venous system is certainly less congested. An improvement has also taken place in the vascular system of the right eye, but it is less marked than in the left.

July 5.—The retinal circulation in both eyes is much improved; the chocolate-coloured blood is no longer observed. The treatment has relieved the venous system of the retina in a very marked degree.

August 9.—The *near* point for pica (No. 8 Jäeger) is four inches from the lens. The far point for type is seven and a-half inches, and for features the same as reported on June 5. The patient has never worn spectacles.

Case 23.—(*Case* 12 *of Myopia*)—*Extreme Myopia—Congenital Smallness of the Optic Discs—a small Posterior Staphyloma on the Outer Side of each Disc—Operation—The Near Point extended Four and a-Half Inches.*

M. A. T., aged 27, a lady's-maid, was admitted into the Birmingham Eye Hospital, under Mr. Solomon, with extreme myopia, of congenital origin, affecting both eyes, for the relief of which she wore No. 11 double concave glasses (English.)

The eyes are brown and unusually large in their transverse diameters. The anterior chambers are comparatively small, and the front of the eyes are rather flat than otherwise. The antero-posterior diameter, as judged by strong convergence of the globes, is not excessive. There is no external sign of bulging of the back part of the eye, as described by Jaeger. The position and movements of the eye are normal.

The far point is the same in both eyes, viz., for small pica, one inch and a-half, and for features, eighteen inches only. She can read with the page almost touching the eye.

Ophthalmoscopic Examination.—On the outer side of the left optic disc is a small diaphonous crescent, (staphyloma scleræ posticum,) which is beautifully shaded by pigment. The optic disc is one half the natural size; much less than I have ever seen it in young children. The chorio-retinal circulation is excellent, but the venous blood is of a chocolate colour. The appearances in the right resemble, in all respects, those of the left, only that the staphyloma posticum is much smaller, indeed in certain positions of the eye the outer side of the optic nerve appears to be simply flattened and of irregular outline. I made several examinations before I discovered the incipient staphyloma.

The right eye was submitted to intraocular myotomy on April 24, after which the far point for small pica was three inches, and for features twenty-four. Intraocular myotomy was performed on the left on April 30.

June 7.—The far point for small pica is six and a-half inches. The near point is three and a-half inches. Features are seen with distinctness at four feet two inches (fifty inches). All objects appear much clearer than they did before operation. The patient from the commencement of the improvement has expressed much gratification at the results.

June 18.—The near point for small pica is to-day four and a-half inches; the far point seven and a-half inches. Features are seen with distinctness at sixty inches (five feet). I look forward to this young person obtaining the power of seeing features with distinctness at twenty-five yards.

June 29.—Features are distinct at six feet.

July 5.—Features are seen at a greater distance than last reported. The retinal vessels are no longer of a chocolate colour.

The patient was now permitted to resume the use of the spectacles which she had worn before the operation, in order that their influence on the progress of the case might be noted.

At the end of somewhat more than three weeks I found that the far point for features, which had increased at the rate of twelve inches weekly, had remained stationary during the time the spectacles were used. I therefore took possession of them, and at the end of three weeks, on a rather dull day, the far point for features was ten feet, showing that the old

(b) I have recently learned that this patient has always been myopic for distant objects. He has never worn glasses.

rate of progress had taken place, *and that intraocular myotomy does not augment the accommodation by changing the curvature of the cornea, but by acting on the mechanism of adjustment—i.e., on the ciliary musele* (c).

When the patient presented herself on the 23rd of August, she complained of "not being well." She was languid, and suffered from circumorbital pains. The retinal veins of the right eye, examined by the ophthalmoscope, were found to have lost their red hue and to have become of a chocolate colour.

Case 24.—(*Case* 13 *of Myopia.*)—*An Attempt to Test the Relative Value of Mr. Hancock's Operation and the Author's Plan of Treatment.*

E. K., aged 16, a resident of Walsall, came under the care of Mr. Solomon as an out-patient in August, 1860. The far point for pica (No. 8) was immediately before operation three and a-half inches, and for features two and a-half yards. The eyes were blue, large, and the anterior chambers full. On September 7, 1860, the *right* eye, which was the more myopic, was submitted to intraocular myotomy. The patient returned to Walsall on the same day. On the 21st the plasters were removed from the eyelid, when small pica (No. 9) could be read at seven inches. The accommodation for features was not materially augmented. The patient did not attend again until this year, when she informed me she had received great service from the treatment, and that it continued until she contracted a fever about six weeks after the operation, which left her in an extremely feeble state, and the vision so much impaired that she was thrown out of her employment as a domestic servant. On July 26, 1861, the patient was admitted as an in-patient of the Ophthalmic Hospital under my care, and after a few days of good living, Mr. Savage, our intelligent House-Surgeon, took for me the following measurements :—

The far point for No. 8 pica with the *right* eye is five inches; the near two and a-half inches. With the *left* eye the far point is three and a-half inches, the near is the same as that of the right. When both eyes are open, the far point is six inches, and the near is two and a quarter inches. The far point for features is six yards. It will be remarked that although the girl had suffered a relapse from the attack of fever, there was a gain in the range of accommodation in reading of two and a-half inches, and for features of three yards and a-half. It is also noteworthy that the right or operated eye, which was originally the more myopic, had the better accommodation. This fact derives additional interest from the *Ophthalmoscopic examinations*, for the accuracy of which I am responsible.

Ophthalmoscopic Examination.—Right Eye.—A large tongue-shaped staphyloma posticum, the greatest diameter of which more than equals that of the disc, is situated on the outer side of the optic nerve, the horns of which meet at its inner or nasal side.

Left Eye.—There is a broad crescentic staphyloma on the outer side of the optic disc, the horns of which are rounded and do not quite reach to the vertical meridian of the optic nerve. In each eye the staphyloma is of a delicate gray colour. The discs are of a pale straw colour. The vessels of each retina are unusually numerous. The choroid pigment appears to be very small in quantity in both eyes.

Operations, August 1.—The ciliary structures were divided in the right eye in the same manner that Mr. Hancock operates for glaucoma, with this difference, that the incision was extended somewhat further into the corneal structure, with a view to reduce, if possible, the convexity of that membrane, which was very considerable. On the left eye the incision was made through the muscle on a line parallel with one of the equators of the globe, instead of as in the right at a *right angle* with the corneo-sclerotic union.

August 16.—The near point, when both eyes are open, is for pica four inches and a-half, being a gain of two inches; the far is seven and a quarter inches. The far point of the right eye is five inches and three-quarters, the near is three and a-half. The far point of the left eye is six and three-quarters; the near is four inches.

19th.—When both eyes open the far point for features is twenty-two yards. The right eye is more myopic for features by eleven yards than the left.

September 10.—The far point for features, when both eyes are used, is twenty-seven yards, being a gain of twenty-one yards since the operations, which were performed six weeks ago. The prominence of the right cornea is certainly lessened.

This patient has never worn spectacles. In instances of myopia, in which one of the eyes is submitted to the operation which I advocate, and the fellow on the same day to a different Surgical proceeding, there is considerable difficulty in estimating the value of the latter, because some are remarkably relieved by a single intraocular myotomy, (d) and cases where such operation has been followed by a limited amount of benefit have obtained a far point for features of twenty-five, thirty, or more yards after the second eye has been subjected to intraocular myotomy. (e) In the instance above detailed it will be remarked the eye with the best accommodation was treated by Mr. Hancock's plan of incision, yet its fellow obtained the greater range.

Case 25.—(*Case* 14 *of Myopia.*)—*Infantile Purulent Ophthalmia and Ozæna, followed by Notched Permanent Teeth, Nebulæ of the Corneæ and Myopia in Adult Life—Intraocular Myotomy on one Eye—The Far Point for Reading extended from Five Inches to Ten and a-quarter, and for Features from Four Yards to Thirty.*

— S., aged 21, suffered in a day or two after birth from purulent ophthalmia and an obstinate, copious, and most offensive ozæna.

In February, 1861, I was consulted for the patient's short sight, which had existed from his earliest recollection. Both the corneæ presented nebulæ. Around the rim of the left cornea was a faint zone, and the ciliary veins in both eyes were enlarged. The right eye was the best. With both eyes open, the far point for reading small pica was five inches, and for features four yards. The patient looked unhealthy, his tongue was furred, and his habits were not so regular as they might have been. I therefore placed him on a plan of diet and sent him into the country for a fortnight.

On February 25, I performed intraocular myotomy on the right eye, and displaced the pupil slightly downwards and inwards. The patient after this operation was not very judicious in the choice of his diet, and in other respects, hence some ciliary irritation manifested itself, which proved troublesome for a time, and then entirely subsided.

May 4.—The far point for small pica is ten and a quarter inches, and for features full thirty yards. Large objects such as houses are seen at a much greater distance than they were before the operation. The left is nearly as good as the operated eye. The hands of a church clock are plainly seen at 200 yards.

September 10.—The improvement is maintained. This patient has never worn concave spectacles.

Case 26.—(*Case* 15 *of Myopia*)—*The Far Point for Features extended by Operation from about Twelve to Twenty-eight Yards.*

Jane F., aged 7, applied to Mr. Solomon because her schoolfellows laughed at her when she was reading, she held the book so close to her eyes.

In the early part of June, 1861, her accommodation for pica (No. 8 Jäeger) ranged from two inches and a quarter to thirteen inches and a-half. The far point for features was nine yards and a-half. Ten days after these measurements were taken by Mr. Savage, I found the accommodation on a sunny day to range from two and a-half to sixteen inches, and that the far point for features was eleven yards and a foot. The brightness of the day and the uncertainty which attends the vision of some myopic eyes will sufficiently account to those who have given attention to the subject under consideration for this discrepancy.

Ophthalmoscopic Examination.—The outer side of the left optic disc is bounded by a narrow segment of pigment. The right optic disc is more flattened than normal at its outer and upper border. The veins in both eyes are very large, and of nearly the same shade of colour as the arteries.

Intraocular myotomy was performed on both eyes on June 15, 1861, and

On September 16 the far point for features was thirty yards. The near point for pica (No. 8) was two inches and three

(c) Since I wrote this I have had a case in which the arch of the cornea was diminished. An escape of vitreous attended the incision.

(d) See Cases 2 and 14.

(e) See Case 8.

quarters. She goes to school, and reads with comfort at from sixteen to eighteen inches.

My notes for July 16 state she could thread a needle at six inches from the eyes, and that her mother reports she has ceased "to screw her lids when looking at an object," which is a decisive indication that the myopia has been considerably diminished.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

Assistant-Physician to the Metropolitan Free Hospital.

REPORT ON SYPHILITIC INFLAMMATIONS

OF THE

RETINA, CHOROID, AND VITREOUS BODY.

(Continued from page 404.)

Case 13.—*Primary Syphilis followed by Rash—Failure of Sight Three Months Later—Opaque Condition of the Vitreous in Both Eyes.*—Thomas R., aged 36, a sailor, of dark complexion and healthy aspect, was admitted in April, 1861. He stated that his sight had been perfect until the preceding September, when it began to fail in the right eye, and soon afterwards in the left also. He had no material pain. Three months before the failure of sight he had a chancre, which was followed by rash on the legs, thighs, and scrotum. He was laid up for six weeks, and was salivated. He considered that his sight had been as bad as at present since March last. By aid of the ophthalmoscope the reflex was found to be of a dull reddish-brown. There was a diffusedly opaque condition of the vitreous in both eyes. He was examined by several observers, and none could see the optic disc in either eye. There was no effusion of blood. I have no note of further progress. Specific remedies were, of course, ordered. It will be noticed that he had been salivated for the original disease.

Case 14.—*Syphilis, Primary and Constitutional—Failure of Sight in One Eye, Three Months after Primary Disease—Retinitis.*—Mrs. L., a pale woman, aged 23, was admitted May 27, 1861. The sight of the right eye had been failing for about three months and a fortnight. It came "as a little fluff," which she attempted to "brush off." She was confined a month before admission. The child was a large one, but it had been, she said, "dead for ten days before birth." She, poor woman, ascribed her illness to grief, which "turned her blood, and caused her to come out in sores on the privates and blotches on the skin" five months ago. She was under Medical care, and was improved by treatment. She never saw well with the left eye. There are extensive white-margined superficial sores on the tonsil and velum, scars of deep ulcers in the tonsils. A general haze of the vitreous and choroid was all that was seen by the ophthalmoscope. Iodide of potassium, ten grains three times a-day, was given. June 10.—Improved. Can now read No. 1, Brilliant, fairly. Not the least congestion of tunics. On July 17 the mistura ferri composita was given instead of the iodide. On August 12 she complained that she could not see so well as a few weeks ago. She could see objects below the axis, but not well above; thus, she could read No. 1 easily when looking downwards, but not No. 20 when held above her. There were still margined patches on the velum. The iodide was again prescribed. September 23.—She had much improved since resuming the iodide. Can read No. 1 with either eye. Irides clear and lustrous. She looks well, and has gained colour whilst taking the iodide.

Case 15.—*Right Eye almost Sightless for Ten Years—History of Constitutional Syphilis Treated by Mercury Eleven Years ago, and followed by Loss of Sight—No Evidence of Iritis—Other Eye not Affected.*—Louisa H., aged 34. She *says* she is a widow. Eleven years ago she had sores, followed by rash, all over the body, and was salivated. During this treatment her eyes began to suffer, but in a little time the inflammation "settled in the right," and the left quite recovered. In about a year the right eye was reduced to about the same state as it is now. She is well aware that her loss of the right eye was consequent on "the disease," and told me so spontaneously. She now is florid, and, excepting acne of the face of rather a suspicious tint, looks healthy. She says that her sight has not varied for ten years, and by the help of the sounder eye she has been able to get her living as a tailoress. With the right she can only see a hand passing before her. She has lately been anxious about the left, but I cannot make out that there are any evident symptoms of failure. She can read easily. The right pupil dilated freely with atropine without showing any adhesions. The fundus of the eye was cloudy, the media being perfectly clear. The vessels entering at the optic disc were extremely minute, almost thread-like, and the margin of the latter were merged in the surrounding fundus, except here and there, where a segment of distinct rim could be seen. The optic disc was very pale. In all parts of the fundus were extensive patches of glistening white, nowhere well defined, and crossed irregularly by tufts of choroidal vessels. Many pigment patches were also seen, and at the yellow spot and around it the exposure of black pigment, in caudate patches resembling small beetles, was especially noticeable. In the other eye I did not observe any peculiarity except that the optic disc here also was rather indistinctly margined. No patches, and no exposed pigment.

Case 16.—*Syphilis during Pregnancy—Congenital Syphilis of the Child—Inflammatian of the Choroid and Retina in the Mother.*—Mrs. H. and her infant were admitted under the care of Dr. Hughlings Jackson at the Metropolitan Free Hospital, the mother labouring under the effects of acquired, and the child of congenital syphilis. During her pregnancy with this child she had primary syphilis from her husband, and subsequently a secondary rash all over the body, the stains of which remain. The child was, as usual, born healthy, but he soon had a breaking out of "ulcers" on his head, and when Dr. Jackson saw him, then six months old, the child had cellular nodes and evident marks of congenital syphilis.

As to the mother, one week after the birth of the child she began to suffer severe pains in the vertex and temples. She next had pain in the eyes and dimness of sight, and was treated for iritis at the Moorfields Ophthalmic Hospital with mercurials, iodide of potassium, and blisters. She then attended at a General Hospital, and was treated for debility.

The pupils dilated well by atropine, leaving, however, a little pigment on the lens. The vitreous and choroid were very hazy, the margin of the optic entrance indistinct, and the vessels small. Dr. Bader, who examined the eyes with the aid of the ophthalmoscope, at once pronounced the affection to be syphilis.

Iodides were again given, and Plummer's pill, five grains, three times a-day. She attended only twice. During that time a little improvement took place.

Case 17.—*History of Primary Syphilis—Inflammation of the Deeper Structures of the Eye.*—Henry W., aged 25, admitted April 19, 1860. The left eye had been bad six weeks. One evening, on going out into the street, he saw a halo, like a rainbow, all round a street lamp. The lamp was about fifty yards away. The halo got less as he neared the lamp. This continued for a week. He could then read pretty well, but it was dim. A fortnight before admission, whilst reading with a shade over his candle, the shade fell off, and the "light came with such force that it sent a shock from the eye to the back of the head." Ten days ago pain "came over the temple, and went right to the back of the head." It was relieved by pressure. Two days before admission his eyes had been blood-shot two days. The superficial tunics of the eyes were congested, and he complained of occipital pain. The pain was only at intervals; he thought it was from the light. When he looked at the light in the morning it came on. Under atropine the pupil dilated round. On April 12 the pupil was oval, and under atropine it dilated (still oval), from above downwards. No adhesions were seen. The sclerotic looked much congested. He complained of pain in his temple. The history of venereal disease was as follows:—He had gonorrhœa a year ago, for one week. At the same time he had a chancre on the glans, which

continued for five weeks. He took pills until his mouth was slightly sore. He had at the same time an enlarged gland in the groin. He had had no rash. On April 19, Mr. Hutchinson examined him by the ophthalmoscope, the pupil being well dilated by atropine. "Retina is clouded, as if seen through a medium, but perfectly transparent. No evidence of patching, nor any evidence of floating bodies in the vitreous." He still has pain in the temples, and now the occipital pain seems to have come forward to about the attachment of the sterno-mastoid muscle. The pain in the temple prevented him sleeping for two nights. The pain was, he said, attended by pulsation, like his pulse. There is no note of any previous treatment. At this date four leeches were applied, and iodide of potassium, five grains three times a-day, was given, and atropine used. He continued attending until November 15. The pupil when under the influence of atopine was always oval, and when not was much smaller than the other. He had occasional attacks of pain around the orbit. On January 18 he began to notice a central black speck in the eye, which increased when he looked in the distance, so that probably it was due to some more local impairment of the retina. Unfortunately there is no note of any ophthalmoscopic examination. He took, for a short time, pills of calomel and opium, but did not improve much in sight. He had less pain.

J. H.

ST. THOMAS'S HOSPITAL

CLINICAL REMARKS ON A CASE OF AGUE COMPLICATING PHTHISIS, AND ONE OF HECTIC FEVER SIMULATING AGUE.

(Cases under the care of Dr. PEACOCK.)

Dr. Peacock remarked, in reference to a patient just admitted into King's Ward, that the case was particularly interesting, as affording an example of the coincidence of phthisis and ague. The patient, a man, aged 50, had all the signs of a cavity at the right apex, and of commencing disease at the left, notwithstanding that he stated that he had been quite in his usual health up to three weeks before. But the most curious circumstance was, that he also clearly laboured under ague. In his capacity of a lighterman he had occasion to go to the Victoria Docks, and sometimes slept for a night or two together in his barge in the docks or in the basin; and about two weeks ago, after having been exposed several hours during the night, he was taken with violent rigors, followed by heat and sweating, and he had had two similar attacks since. The case thus corresponded with one which was in the same ward a few months ago, in showing that the existence of decided phthisis does not afford immunity from the effects of malaria. The latter case also showed that, when phthisical patients take ague, the local disease advances more rapidly to a fatal termination. The case was also a curious contrast to another now in the same ward, which affords an instance of hectic fever, apparently having no connexion with malaria, closely simulating ague. In that instance, a man, aged 23, who had never been exposed in any decidedly malarious district, came into the ward complaining of cough, dyspnœa, and expectoration, occasionally bloody, suffering from attacks of rigors, heat, and sweating, coming on between seven and eight o'clock in the morning, often for several days in succession, then ceasing, and again recurring at about the same time of the day. When first admitted, on careful examination, there were scarcely any evidences of disease in the chest, but now, after somewhat more than three months have elapsed, there are decided signs of a large cavity at the right apex, and of a copious deposit of tubercle undergoing softening at the left. In this instance the symptoms are apparently unconnected with any malarious poisoning. They have proved little amenable to the influence of anti-periodic remedies—full doses of quinine, for instance—and are apparently proportioned to the extent of the tuberculous deposit, and to the rapidity with which it is undergoing softening. A case resembling this also occurred in the ward during the course of the last session, and Dr. Peacock stated that he had recently seen several others in private practice of a similar kind. In all of these the ague-like symptoms were most noticed at the commencement of the pulmonary affection, and corresponded in intensity with the progress of the local disease; and in all the latter had been in course of rapid advance. The total duration of illness in the case which proved fatal in the Hospital was only nine months.

THE LONDON HOSPITAL.

FEMALE CATHETER IN THE BLADDER—RETROVERSION OF UTERUS.

(Under the care of Dr. BARNES and Mr. MAUNDER.)

J. F., aged 29, said to be three months advanced in pregnancy, and the subject of retroverted uterus, suffered retention of urine on September 3. On the following morning a Surgeon evacuated the bladder with a silver female catheter, and left the instrument in the urethra. While thus placed, the top of the catheter slipped off and the tube, (it was afterwards ascertained to be five inches and three-quarters in length,) passed into the bladder, and remained there until September 7, when the patient was admitted into the London Hospital.

On admission the cervix uteri was found to project forwards and upwards, the patient being recumbent. The bladder was distended above the pubes, and pressure over the hypogastric region caused pain. Previous to admission unsuccessful attempts at extraction had been made with forceps and lithotrite, Mr. Maunder, therefore, determined to attempt removal at once by enlarging the urethra. Chloroform was administered, and the patient tied up in the position for lithotomy. A straight staff introduced into the bladder struck the foreign body, which occupied a position from behind forwards, and from right to left. Along the groove of this staff a straight buttoned bistoury was passed, and was made to cut its way out in a direction downwards and outwards to the left side, thus enlarging the anterior two-thirds of the urethra, and admitting of the easy entrance of the forefinger into the bladder. The neck readily yielded to the pressure of the finger, and one end of the catheter having being brought by the latter opposite to the urethral orifice the foreign body was extracted, or rather followed a twisting movement given to the finger, aided by pressure above the pubes and the rush of urine, two pints of which latter, highly charged with blood and of an ammoniacal odour, were evacuated. The recent wound had a very slight tendency to bleed, but this was checked by the introduction of a sponge into the vagina. Surgically the case has progressed very well, and the patient is now, September 11, handed over to the care of Dr. Barnes.

Mr. Maunder remarked that the effect of the altered position of the cervix uteri might be likened to that occasionally produced by the enlarged middle lobe of the prostate in the male, both, in causing retention, and also in tilting up an instrument destined to enter the bladder by the urethra.

Mr. Maunder has since been informed by Dr. Barnes' assistant, Mr. Kitching, that cystitis and retention persisted for many days, the bladder requiring to be evacuated thrice daily, when, about September 28, the patient declared that she had passed a substance, then exhibited, from the bladder. This substance has been carefully examined by Dr. A. Clarke, who believes it to be the urinary bladder of one of the lower animals. October 21.—The uterus is assuming its natural position, the incontinence of urine from which she has lately suffered is gradually subsiding, and the patient considers herself well enough to return home. It is difficult to assign any reason for the attempt on the part of this patient to deceive her Medical attendant. The original retention was induced by a circumstance over which she had no control, namely, a displaced uterus; and the symptoms, excepting the passing of the substance, were the natural result of the accident referred to above.

INTRODUCTION OF A PIECE OF GUTTA-PERCHA INTO THE MALE URETHRA — ATTEMPTS AT REMOVAL—SPONTANEOUS EXPULSION.

(Under the care of Mr. MAUNDER.)

D. C., a man of weak intellect, imagined himself to be the subject of stricture of the urethra, and during the last year has been in the habit of introducing into that canal a strip of gutta-percha. On August 25 on withdrawing the gutta-percha, a portion about two and a-half inches in length remained behind. Dr. Dixon, of Cheshunt, whose patient

he then was, was summoned, and endeavoured, with the best instrument at his command, a pair of dressing forceps, to extract the foreign body, but in vain. Mr. Maunder saw the case with Dr. Dixon about two hours after this attempt; but on endeavouring to introduce a catheter, either with the hope of detecting the gutta-percha in the urethra, or of reaching the bladder, the instrument would not readily pass, and as a slight amount of hæmorrhage had occurred as a natural consequence of the attempt at extraction, it was deemed prudent to desist.

The patient was sent up to the London Hospital the same evening, having previously passed urine as usual, and during the night the piece of bougie came away on micturition. The patient returned home next morning.

Mr. Maunder remarked that immediate interference with a view to extraction was deemed to be inexpedient, because the bougie was not round, but its section oblong, consequently supposing it to be in the urethra, micturition would be possible, and was, indeed, performed as usual.

THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.

TRANSMISSION OF PHTHISIS FROM HUSBAND TO WIFE.

The following case, which is copied from notes taken by the writer about ten years ago, at the City Hospital for Chest-Diseases, is of interest in reference to the question of the possible contagion of phthisis between married persons. It will be observed that both the children were begotten by a father who was at the time the subject of the tubercular diathesis in an active form. We are, therefore, inclined to regard the case as an instance of communication to the mother through the fœtal fluids of dyscrasic peculiarities existing in the father:—

Mrs. C., aged 24, was admitted on account of commencing phthisis, of which both the physical and constitutional signs were well marked. She had been losing flesh for some months, but she had not had much cough until within the last five weeks. She stated that her parents were both of them living and in good health, and that, as far as she knew, consumption had never occurred in any of her relatives. She had enjoyed excellent health up to the time of her marriage, rather more than two years ago. Her husband was at the time delicate, and for the last two years has been attending this Hospital under treatment for phthisis, which is now in an advanced stage. During her first pregnancy Mrs. C. lost flesh and strength, but had no cough. Her first child was born rather more than a year after marriage, and she is now in the eighth month of her second pregnancy. Her first child was healthy-looking when born, but wasted away and died when a month old.

GUY'S HOSPITAL.

FRACTURED RIBS AND SCAPULA—RUPTURED SPLEEN.

A man was admitted on the evening of October 12, 1860. Whilst at work at Deptford, on the main drainage, he fell, and a waggon of earth passed over his body. He was dead on admission.

Autopsy.—There was an incised wound cut over the pubes, and another over the penis, but no bruises elsewhere, although it was evident that the left side of the chest had been much contused from fracture of the ribs and scapula. The head was not opened. No appearance of injury. All the ribs on the left side were broken. There was blood effused beneath the costal pleura, and some escaped into the chest. The left side of the chest contained about a pint of blood. The left lung was ecchymosed on the surface, but there was no laceration of tissue. The peritoneum contained about two or three pints of blood (not of a pitchy character) which proceeded from the lacerated spleen. There was a little blood under the peritoneal capsule of the liver, but no laceration. The spleen was smashed into a pulp, separated into two or three portions, one of which lay loose in the abdomen. Behind the peritoneum was also much effused blood. This proceeded from the kidney on the left side, the upper part of which was much lacerated. The surface was covered with three or four fissures, one of them being deep. These had evidently been produced by a forcible stretching of the organ.

Medical Times and Gazette.

SATURDAY, OCTOBER 26.

ELEMENTS OF ORATORY.

The newspapers, which in the dull season usually amuse their readers by baiting the parsons, have of late been prolific in disquisitions on good and bad clerical reading. Dr. Ramsbotham, too, in his Introductory Lecture at the London Hospital, recommended his pupils to acquire the art of public speaking,—to drill their minds to the choice of words suitable for public occasions, and to habituate themselves to fashioning sentences and sounding periods. He said:—

"It has always appeared to me that Medical men are peculiarly deficient in this winning art,—at least they are so when contrasted with the clergyman or the barrister. The reason is obvious; they do not accustom themselves to its exercise. They work, indeed, more with the pen than with the tongue. Why is it that many men who can write an excellent letter, and throw off a very tolerable essay, make so sad a display if called on to deliver, I will not say an extemporaneous oration, but even a short speech of ordinary courtesy in public? It is because they are placed in an unusual position; and, although words flow readily enough to the nibs of their pens when writing, the same words will not rise to the tips of their tongues when speaking."

There is no doubt that the power of speaking well, confers great advantages on anyone whose avocations bring him into public life; and that it would be well if our professional brethren spoke more frequently in public, and threw their weight more decidedly into questions publicly discussed of public health and social economy. Let us see then what are the elements of oratory; for, whether in reading, or in recitation without book, or in extempore speaking, the prime elements are the same. The process is partly mechanical, partly mental. By the proper application of mechanical and mental efforts, the speaker may get a good *manner*, and if he have that, the listeners are usually very indulgent as to the *matter*. He must first of all have access to good models of that pronunciation which the custom of our day decides to be the best; and for English, the speech of the upper classes who live alternately in town and country, is the best model. A rustic dialect is to be avoided on the one side, and the horrid Cockney twang still more so on the other. There must be a correct ear to appreciate the pronunciation, and organs of sufficient flexibility to imitate it. Pronunciation is conventional and fluctuating, and impossible to be learned from books; it is a great torture to children in spelling; but the fact remains, that written language gives little or no clue to *sound*. The learner ought first to learn all the varieties of vowel *sound*, and discarding all notions of six vowel letters, let him study the vowel *sounds*, which he can produce by his own organs. If he begin by vocalising the broad A, as in fAther, he will find that by contracting the oral orifice circularly, he gets the series—broad *a*, *au*, *o*, *oo*;—and by contracting it linearly, gets the other series broad A, *ê* (as in *bête*), *e* (as usually rapidly pronounced at the end of the article the), and *ee* (or the foreign *i*). These vowel sounds, however, are but half-a-dozen out of the almost infinite series which may be generated by modifying the orifice of the mouth; but it is essential to accustom the ear to definite good standards of each sound. Of these elementary sounds and their combinations, the ordinary English vowel sounds consist. The learner must remember that (so confused

is written speech) whereas some diphthongs (or two letters) as *oo*, represent one vowel sound, some single vowel letters represent a diphthongal or double sound. Thus, the first letter of the English alphabet is commonly degraded into *ai*, and *i* and *u* are each the representatives of a double sound. Purity of vowel sounds is one of the most agreeable accomplishments of the orator, and one of the rarest. Amongst the educated classes it is apt to be marred by a finicking affectation of refinement : amongst the lower by coarseness. Let anyone imagine the pure pronunciation of the vowel sound in the word "Lord," and then think of the varieties he hears. The mincing clergyman renders it as "Lörd," with a kind of indefinite vowel-sound like that of the German *oe* or *ö* ; the Zumersetshire varmer calls it "Lard" ; and the Chancery barrister contracts the whole word into "Lud," vowels and consonants together. The rustic pronunciation of most vowels is coarse, but the Cockney is the vilest. The consonantal *sounds* have next to be studied, and here, as with the vowels, it must be remembered that one letter may represent two sounds, whilst some simple sounds, as the *theta*, are obliged to be represented by a combination of letters. The division of sounds into labial, lingual, guttural, and nasal, with the difference between mutes and liquids, cannot be too closely studied, whether as an aid to oratory, to grammar, or to philosophical etymology. The mechanism of every sound should be clearly made out ; and the sounds which come together as it were by nature should be recognised. It is something to know the relation between the cognate forms of spelling, as *hympnal* for *hymnal*, *Hampton* for *Hamton* and the like. A study should be made of the number of mechanical processes requisite to produce all the sounds belonging to every syllable ; and care should be taken, both to pronounce the vowels fully and purely, in order to develop the musical tone and rotundity of the sounds uttered, and to give the consonantal sounds clearly but rapidly, remembering that, however essential for distinctness, like the bone in a limb, they are in themselves unmusical and grating. It will be seen that in a language like our own, abounding as it does in consonants and monosyllables, the number of articulatory processes that must be gone through is very many. For example, there are five distinct consecutive sounds in the one monosyllable "*works*." The words "*omnia opera*," with six syllables, have ten consecutive sounds ; and the corresponding English words "*All thy works*" have as many sounds with only three syllables. Hence, the greater clearness and beauty of languages in which the hissing and mute consonants are separated by musically-toned vowel-sounds; and the tendency in languages which abound in consonants to omit some of them and degrade the pronunciation. The word *works* is commonly robbed of its "*r*." We may also form an opinion as to whether it is a good or bad thing for our language, that the clergy have fallen into the vulgar habit of clipping off the inflection "*ed*," almost the only one that remains in our language. Twenty years ago it was customary in sacred reading to preserve the *ed* at the end of words, which gave a kind of quaint, antique, reverential air to the performance. Now-a-days, "Dearly beloved brethren" is cut down into "Dearly belov'd brethren ;" but it will not rest here ; the clash of consonants is so thick that a very few years will bring it to "dearly belov' brethren ;" for the inflections of language are contracted to escape the labour of pronunciation. Nevertheless, "Out ! damnèd spot" has a beauty and a fluency which it were vain to seek in "Out ! damn'd spot." When we add that the speaker should be erect, so that the muscles of the chest may be tightly braced and resonant, and that the head should not lean forward on the chest, so that the voice may not be stifled, we have said enough for the present on the mechanical portion of the art of Oratory.

THE WEEK.

On Monday, the Earl of Carlisle presided at the opening of a new Infirmary for Diseases of Women and Children at Leeds. In the course of a speech after the banquet which concluded the ceremonial, Lord Carlisle spoke feelingly of the sufferings of the individual operatives and their families, though whom the colossal fortunes of manufacturers were accumulated ; and especially of the absence of quiet and comfort from the crowded home of the artisan :—

"The hard-worked *employés* of the factory have not the free draught of air, the open prospect, which those enjoy who live away from towns and cities. Instead of these advantages they have the horrors of the narrow court or pestiferous alley, the heated atmosphere of the workroom, and the ceaseless clank of engines. And who, let me ask you, are the objects for which this meeting now makes an appeal ? The women and children of this labouring population. Their very names make their own appeal to every feeling of chivalry and tenderness in man. It is for their delicate frames, and not less sensitive feelings, that the repose, the quiet, the tranquillity, the soothing care and attention of such an Institution are suited and called for. I feel thoroughly that I can add nothing to the force of the appeals made to you from other sources, from sacred lips and in sacred places, as well as from the convictions of your own judgments, and the sympathies of your own hearts."

The promoters of vaccination at Belfast have obtained a victory, and, still better, an amicable one. In order to promote vaccination, six *stations* had been established, to which the poor might bring their children for the operation. The allegation was made that the poor did not resort to the stations, and that they consequently were a useless expense. On the other hand, it was proved that the poor had been vaccinated in greater numbers, and the result was that the Dispensary Committee rescinded their resolution for the abolition. Some rumours which had been propagated, to the effect that the lymph used was impure, were brought before the Committee, and shown to be unfounded.

It is proposed to establish a Veterinary College in Dublin, and the proposal meets with the hearty sanction and support of our learned correspondent, Dr. W. R. Wilde. At a public meeting held for the purpose, he described the present ignorance and cruelty of the farriers, to whose tender mercy the dumb members of the animal creation are committed. He observed :—

"Who is there amongst us who has ever seen a farrier examining or operating on a horse—or a cow doctor (such as was this very year caricatured in our Art Exhibition) searching for an elf-dart or fairy-arrow under the skin of an animal labouring under the murrain or the blackleg, and when he had juggled one out of his sleeve, and boiled it in some rap halfpence in drink for the suffering creature—but must have regretted not merely that such ignorance and popular superstition should prevail in any civilised country in the middle of the 19th century, but also that the property of the poor and the rich should be entrusted to such imposture ? Ireland is the great emporium for the animal food of the United Kingdom, from its position and the nature of its soil and climate. But while this island is so peculiarly suited to the rearing and fattening of cattle and the breeding of horses, it has also been, from the very earliest times, subject to the most dire pestilence affecting both man and beast that any country in north-western Europe has been subjected to. In consequence of the paucity of population, the universal improvement in the dwellings, food, and clothing of the people, the general drainage of the country, the opening up of distant districts by railway, the establishment of Poor-laws and Hospitals, the great advance of Medical science, and the sanitary regulations in our cities and large towns (including the improved water supply to the metropolis), I fear not to prophesy that we can never again witness

such scenes as those produced by the great famine and pestilential period which we have so recently passed through. But the pleuro-pneumonia and other epizootics, against which no national precautions have yet been taken, will, I fear, re-appear. From the pre-Christian period down to the present time, no century has elapsed without frequent invasions of cattle diseases. There has been scarcely a domestic or a wild animal in Ireland that has not in its turn suffered from pestilence—even bees did not escape—and the coincidence of these various epizootics with distinct 'epidemic constitutions' and pestilence in man—sometimes preceding, and at others following in the track of some great plague—are subjects well worthy the consideration of the scientific. I only wish that our country Medical Practitioners had acquired a little knowledge by even a course of lectures on the diseases of the lower classes of animals, and I feel assured that when this College is established, many Medical students will take advantage of it. High farming and improved agriculture chiefly consist in the raising of green crops—but for what? To supply man with food—yes, but not directly. It is to fatten sheep, horned cattle, and pigs. But the higher you feed them, and the higher you breed them, the greater care they will require to keep them and to preserve their health."

The country butchers will not take a lesson. A man from Salisbury has been committed to Newgate for trial, on a charge of sending to Newgate Market, for food, the "four quarters," or rather, as we conceive, the fore-quarters of a dead cow, which he had bought for the price of her hide. The fore-quarters are often sent for sale when the hind-quarters are not producible, in consequence of the state of the parts contiguous to the abdomen.

Polar Travelling seems one special function of the Medical Profession. Dr. Hayes, the American traveller, was last heard of at Halifax, on his return home. He sailed from Upernavik on August 9, 1860, northwards, and arrived on September 27, at Winter Harbour, about eight miles north of Cape Alexander, where the party wintered, in latitude about 78°. There, during the winter, a great richness of animal life was found, no less than 300 reindeer having been brought on board, and many more were killed but consumed on shore. In addition to these, about 60 blue foxes and 20 hares were slain. Of the animals many were very fat. Dr. Hayes himself undertook an excursion with sledges, on April 4, 1861, from which he returned on May 28, having reached, as it is asserted, the high latitude of 82½°. No "open Polar Sea" was found, but only the streams of open water not unusually met with on the coasts of Greenland.

Mr. Mechi gives us some hope that the sewage from towns will not long continue to be wasted. In a letter to the *Times* he says:—

"At the Earl of Essex's estate, Cashiobury, I yesterday saw a stream of sewage from Watford applied with much profit to the soil, as proved by the enormous crops of roots, rye-grass, and other productions.

"The sewage of Wimbledon now flows over twenty acres of land in Wimbledon-park, and that portion on which it was applied in the spring has produced luxuriant and remunerative crops. The cost of preparing the land for its reception by gravitation is only between £3 and £4 per acre. At the Colney-hatch Lunatic Asylum the sewage is being availed of, and I am happy to say that the governing powers of various lunatic asylums, pauper unions, prisons, and charitable institutions are considering this important question.

"The sewage of some 25,000 people at Croydon is flowing by gravitation over 300 acres, a spirited and close calculator from Essex having rented the land at a high rental for a long term Altogether, it is refreshing to think that we shall soon see our exhausted fields replenished with fertility by the sewage of our towns.

"The great sewers of the main drainage are sufficiently high above ground to permit a most extensive irrigation from them by gravitation, at a very small cost for preparing the land."

Let us call attention to these palpable facts. Nothing is more necessary for infant life than *fat* in a palatable and digestible form. Such fat is afforded by the cream of cow's milk. But the cream is systematically stolen from the milk before the latter is sold to the poor. Children, if delicate, refuse almost every form of fat except fresh butter. But fresh butter is almost unattainable from its price. If the application of sewage increases the produce of green crops, and of dairy produce, it will tend directly to the preservation of infant life.

The British Pharmacopœia is so far advanced that it will probably appear early next spring. A Conference was held at the Edinburgh College of Physicians on the 12th inst., for the general adjustment of details, under the presidency of Dr. Christison, Chairman of the Pharmacopœia Committee. The other members who attended were Dr. F. Farre, Dr. Garrod, Mr. Squire, Professor Apjohn, Dr. Aquilla Smith, Dr. Neligan, Dr. Andrew Wood, Dr. Douglas Maclagan, Dr. Charles Wilson, and Mr. Robertson.

The Vestry of St. Luke's, Chelsea, advertised for a Medical Officer of Health, received applications from a large number of candidates, and elected Dr. Barclay, whom we suppose they thought the best man, although he does not reside in the parish. We have never heard a complaint against the manner in which he has discharged his duties, nor is there the least pretext for cutting down his salary. He sought and obtained an appointment open to all the world; and the principle of protection, or of confining an office to a resident, to the exclusion of non-residents, is one not fit to be held by members of a liberal Profession; however just it may be to say that a resident *equally competent* should be preferred to a non-resident. Whether or not Dr. Barclay is to have the office of Analyst of Food, matters very little to anyone but the parties concerned; but we think that members of our Profession, who desire any office under a Vestry, would do well to abstain from abetting their employers in acts of meanness or intrigue, from which they themselves would be sure to suffer in the long run. We fully commend the spirit of the Medical Practitioners of Chelsea, in vindicating their own fitness for the office of Analyst, or any other, but they must beware of encouraging any persecution of Dr. Barclay, for they may be sure that it will fall heavily on their own shoulders, should they happen to be his successors.

REVIEWS.

A Manual of the Dissection of the Human Body. By Luther Holden, F.R.C.S. Illustrated with numerous Wood Engravings. Second Edition. 8vo. Pp. 576. London: 1861.

The student formerly stood at no time more in need of help than at the moment of his commencing the dissection of his first "part." Arrayed in sleeves and apron, new, rigid, strange, and rather too warm, with instruments in his hands, as yet unaccustomed to their use, he found himself with a "Dissector's Guide," which to him was as useful as the sign-post to the man who could not read, although it bore an inscription to the effect that those who were similarly situated "might inquire at the blacksmith's opposite." Now, however, thanks to Mr. Luther Holden, who may almost be said to have invented a new system of teaching anatomy by diagrams, much of the old difficulty has been annihilated. We are not forgetting, in saying thus much, the great services rendered by Mr. Erasmus Wilson, whose well-known *Vade Mecum* was for a long time the only respectably illustrated anatomical work.

Mr. Holden's "Human Osteology" was a decided success; students were not long in appreciating the fact that it took away the great stumbling-block of their very earliest footsteps, and has emancipated them from months of dreary lectures on the bones; for surely no lecturer will now venture to occupy the greater part of the three first months of the the session by osteological detail.

The present edition of Mr. Holden's "Manual of the Dissection of the Human Body" is enriched with diagrams and drawings which explain themselves after his favourite plan adopted in his "Human Osteology,"—placing the names of the different parts either on or immediately at the side of the diagram or drawing. By this means, not only a great saving of time is effected, but the student's mind receives a much more vivid impression.

To an anatomist nothing is more refreshing than a new diagram. The pleasure of meeting old acquaintances does not obtain, with certain exceptions, in the case of anatomical plates. There are some anatomical wood-cuts that we have quite a spite against. Whatever work on physiology or anatomy, popular or technical, one may take up, one is sure to meet with some illustrations which, to add to their offensiveness or their ubiquity, are seldom otherwise than incorrect and out of drawing. Mr. Holden states that most of the illustrations in the Manual are his own drawings on wood from nature or from photographs, or are copies of such diagrams as his experience has shown to be useful. Accordingly, we find every variety of illustration, from the bold diagram, almost, as it were, transcribed from the black board, to the finished wood engraving. The illustrations are distributed without stint, and in some instances a *replica* has been given where otherwise the reader would have to refer from the page on which he was occupied to some other part of the book.

With the kind of illustration Mr. Holden has given, the student who will carefully read over the description of the part he is about to dissect, can have no good cause for perplexity.

We have first spoken of the illustrations, as these are the great novelty of the edition. The text is not the less entitled to praise. Conciseness has been attained without sacrifice of style. Mr. Holden writes not only as an Anatomist, but as an Anatomist and Practitioner. As a Surgeon, he knows exactly the value of minute and varying details. For example, Mr. Holden disposes of the cutaneous nerves of the front of the thigh in half a page. The *relative* importance of the anatomy of these nerves is thereby indicated. We have known a student ruined by the cutaneous nerves of the thigh. From the elaborate account given of them in the "Guide" he employed, he was led to attach to these nerves a dignity far beyond that of the femoral artery itself, and in consequence could not be prevailed, after having most laboriously "got out" these nerves, to cut them away and proceed with his dissection. Let the student practise his hand on the cutaneous nerves of the thigh if he will, but he must not be permitted to infer that, because their dissection is tedious and difficult, their importance is great.

When a practical interest appertains to a part or region, Mr. Holden has spared no pains to render his description complete and intelligible; as an example, we will cite the dissection of the male perineum—six illustrations are employed, and thirteen pages of letter-press. We have, however, to confess that Mr. Holden has carried simplification almost to the verge of obscurity in a single instance, where, in dealing with the superficial fascias of the perineum, he says, p. 340, of "the superficial or muscular fascia of the perineum;"—"When the subcutaneous structure is fairly cleared off, we come to the fascia which invests the muscles of the perineum, and is, in every sense, analogous to muscular fascia in other parts, for it not only covers the muscles collectively, but provides each with a distinct sheath. At the same time, it is much less dense, though more elastic than the strong fascia, say for instance, of the limbs: there is, indeed, so much resemblance between it and the deeper strata of the subcutaneous tissue, that you will hardly recognize any distinct demarcation between them." Whether does the Author desire the reader to infer that the fascia in question is more essentially allied to the superficial or subcutaneous fascia, or to the fascialata, say, of the thigh? The difference between the two structures is as great as exists between bone and ligament.

Mr. Holden gives an account of the brain in about twenty pages; he nevertheless finds space to describe the peculiarities of the circulation in long-necked, herbivorous quadrupeds, to mention certain irregularities of development, and to touch upon the comparative anatomy of the corpus callosum, the lateral ventricles, and corpora quadrigemina.

The ridiculous nomenclature hitherto acquiesced in has proved a great obstacle to the study of the brain. Surely the claims to immortality of such men as Sylvius, Varolius, Vieussens and Monro, do not depend upon their names being appended to a notch between two protuberances of brain substance, a band of fibres, a nodule of grey matter, or a foramen. Mr. Holden has steered with the hand of a practised mariner between the difficulties of rationalizing the description of the brain and respecting ancient usage.

Mr. Holden has at various points interspersed surgical remarks. Our own prejudices on the desirableness of this may be unfounded, but we decidedly are of opinion that a "Dissector" should be an anatomical book pure and simple. Surgical literature grows old much more rapidly than anatomical; to combine anatomy and surgery in one work is, to our way of thinking, like building with materials of unequal strength. We must, however, do Mr. Holden the justice to say that the surgery he introduces is of a quality well tested, and occupies but a limited share of space. At the risk of being hypercritical, we have thought it right to enter the above protest. Still we may most conscientiously say that Mr. Holden has well earned the gratitude, not only of the student, but of the teacher of anatomy. He has lightened the labours of both, and has given a work that neither can read without pleasure, nor rise from without the conviction that the Author is a scholar and a gentleman.

On the Sounds Caused by the Circulation of the Blood: Being a Thesis read in the University of Dublin for the Degree of M.D. at the Winter Commencement, 1860. By Arthur Leared, B.A., M.D. Dub., M.R.C.P. Lond., etc., Physician to the Great Northern Hospital, etc. Pp. 22. London: 1861.

We cannot attempt here, and in the space allotted us, to discuss critically Dr. Leared's views. The following extracts will exhibit them:—

"If the motion of the blood and arteries were equable, no sounds whatever would be produced in a state of health. But the blood is, by the action of the heart, thrown into impetuous and interrupted motion, and these give rise to normal sounds, known as the first and second sounds of the heart; both are formed in the outlets of the two great vessels, and the mechanism of both is essentially the same."

"The first sound coincides with the ventricular systole, and is caused as follows:—Blood having been forcibly driven from the ventricles into the aorta and pulmonary artery, comes into forcible contact with blood in these vessels, which, supported by the semilunar valves, had attained a state of momentary repose. The impact between the fluid in motion and that in a state of rest gives rise to the sound."—P. 9.

"The second sound occurs during diastole, and in its mechanism closely resembles the first. The blood having been driven with much force into the aorta and pulmonary artery, a portion of it recoils, but is checked in its rapid descent towards the heart by the semilunar valves. The sound is caused by the concussion thus induced, the force of which is, however, by no means sustained by the valves alone, for they are thoroughly supported by the ventricles and their contents. This is obvious, since there can be no approach to a vacuum in the heart. The valves are to be regarded as separating media, which do not themselves sustain the force of the descending blood. A valve thus supported is known in the arts as an equilibrium valve."—P. 12.

Mentone and the Riviera as a Winter Climate. By Henry Bennet, M.D., Member of the Royal College of Physicians, London, Physician Accoucheur to the Royal Free Hospital, etc. Pp. 112. London: 1861.

The result of the observations of a Physician of repute, this little book will no doubt be acceptable to the Profession, especially just now when invalid patients are contemplating migration. A great part of the book is occupied, as it should be, by such a description of the climate as, apart from complicated tables, commends itself to the intelligence and acceptance of practical men. The following extract appears to sum up Dr. Bennet's observations on this head:—

"The characteristics of the climate of Mentone, as evidenced during the two last winters—unusually severe ones,—are the following:—The absence of frost; the absence of fogs; the paucity of rainy days; the clearness of the sky; the heat and brilliancy of the sun when it does not rain; a rather cool or chilly night temperature; a bracing coolness of the atmosphere throughout the winter out of the sun's rays. When, on the contrary, the sun is obscured with clouds, and rain falls, there is as miserable and chilly a state of things as in a drizzling November day in England. As, however, rain only falls on a small number of days, and then often not during the whole day, and as the other days are uniformly bright, clear, and sunshiny, five days out of six, throughout the winter, exercise in the open-air can be prudently taken, with both satisfaction and benefit, from ten until four or five."—P. 110. The winter atmosphere being dry, although the temperature may fall to 40°, catarrhal affections are not prevalent, as they are in the moist and cold winter weather in England. "Those who enjoy the greatest immunity are those who keep their rooms cool and well-ventilated night and day. Those who make large fires, who close their windows hermetically, and avoid every breath of air, are precisely those who suffer most in this respect."—P. 63. But there is another aspect in which the Medical man should regard any locality which he is about to recommend to a patient for a winter residence. Dr. Bennet has a good word for the comforts of Mentone.

An Introduction to Practical Chemistry, including Analysis. By J. E. Bowman. Edited by C. L. Bloxam. Fourth Edition. 8vo. Pp. 311. London: 1861.

Mr. Bloxam succeeded the late Mr. Bowman as Professor of Practical Chemistry in King's College, and as he has proved a worthy successor in this important chair, so he has also proved a good editor of a good work. The chapters on Qualitative Analysis have been re-written. The chapter on the Blow-pipe has been much enlarged, and the student is supplied with a good account of the methods of Volumetric Analysis now so generally employed by chemists. A very useful chapter is added, "containing directions for improvising reagents, or substitutes for them, when they cannot otherwise be procured." We know of no work on chemistry so well adapted to explain to beginners, simply and intelligibly, the various processes employed in analysis.

A Manual of the Practice of Medicine. By G. H. Barlow, M.A. and M.D. Second Edition. Small 8vo. Pp. 738. London: 1861.

This Edition of Dr. Barlow's well-known Manual has been carefully revised, parts have been re-written, and much new matter has been added. Recent discussions as to the treatment of inflammation are carefully reviewed, and the author stoutly defends his views as to the treatment of cholera. However widely the advocates of the universal brandy-cure may differ from Dr. Barlow as to his treatment of inflammation, and reserving to themselves the right of agreeing to differ on this particular, they will probably agree with us that this Manual is precisely what the author intends it to be,—a useful clementary and practical hand-book for students.

Medical Jurisprudence. By A. S. Taylor, M.D., F.R.S. Seventh Edition. Small 8vo. Pp. 947. London: 1861.

The first edition of this work appeared in 1854. Since that time, not eight years, 15,750 copies have been circulated. This is sufficient proof that numbers both of the Medical and Legal Professions have found the book practically useful. All we need say of it, therefore, is that every chapter shows evidence of careful revision, and summaries of recent cases are added, bringing the work quite up to the level of the knowledge of the day. The Author acknowledges his obligation for assistance to the late Lord Justice Clerk Hope and many other legal and Medical contributors, and refers with becoming satisfaction to the fact that the College of Physicians and the Society of Arts awarded to his work last year, "under the will of the late Dr. Swiney, the quinquennial prize of £100, and a silver prize of like value." Every reader of the book will confirm the justice of the award.

A Manual of Chemistry, Descriptive and Theoretical. By W. Odling, M.B., F.R.S. Part I. 8vo. Pp. 380. London: 1861.

The work, of which this is the first part, has been especially undertaken at the request of Professor Brodie, "who wished to have, for the use of his class at Oxford, a chemical text-book arranged in accordance with his own method of teaching." It will be completed in two or, at most, three parts. The author adopts the system of unitary formulæ, and shows very successfully how the employment of these formulæ "facilitates the generalisation of chemical truths." We need only say of this first part, that it will enhance the high reputation so worthily enjoyed by the Professor of Practical Chemistry at Guy's Hospital.

Eastbourne, and the Advantages which it Possesses as a Resort for Invalids; with General Remarks upon Sea-Bathing, Sea-Air and Exercise. By William Abbotts Smith, M.D., M.R.C.P., Senior Physician to the City Dispensary, Assistant-Physician to the Metropolitan Free Hospital; and Charles C. Hayman, M.D., Licentiate of the Royal College of Physicians, Edinburgh, formerly Visiting Surgeon to the Town Malling Lunatic Asylum, Kent, etc. Pp. 94. London: 1861.

Our readers are informed who the authors of this *brochure* are and what they are, but they are not told why it was necessary that two Professional luminaries should come into conjunction to produce it. The discovery of aniline and its reactions will do more for these gentlemen and their book than anything which they have put within its covers.

A Glossary of Mineralogy. By H. W. Bristow, F.G.S. 8vo. Pp. 420. London: 1861.

This is really a "handy book." A concise account of all known minerals is given in alphabetical order, and references are added to the cases in which specimens may be found in the British Museum and the Museum of Practical Geology. There is also a useful introduction on the characters, properties, and chemical composition of minerals.

British Wild Flowers. Illustrated by J. E. Sowerby. Described by C. P. Johnson. Parts 2 to 5. London: 1861.

The re-issue of this work proceeds very satisfactorily.

A History of British Sessile-Eyed Crustacea. By C. Spence Bate, F.L.S., and J. O. Westwood, M.A. Part I. London: 1861.

This is the first part of what promises to be a very useful work. It is extremely well illustrated.

Climates for Invalids; or, a Comparative Inquiry as to the Preventive and Curative Influence of the Climate of Pau and of Montpellier, Hyères, Nice, Rome, Pisa, Florence, Naples, Biarritz, etc., on Health and Disease, etc. By Alexander Taylor, M.D., F.R.S.E., etc. Third Edition. Condensed and Considerably Altered. Pp. 282. London: 1861.

This work is so well known, and so completely accepted by the Profession, that we need say little to recommend the third edition to our readers. The condensation and alteration it has undergone are improvements.

Living Spermatozoa in the Vagina Eight and a-half Days after Intercourse.—In the *American Medical Times*, for March 9th, Dr. S. R. Percy reports a case in which, eight-and-a-half days after the last sexual connection he found semen issuing from the os uteri. A microscopical examination revealed "living spermatozoa, and many dead ones." During this time the husband of the patient had been from home. Of the honour and veracity of the patient, Dr. Percy says: "I would stake my reputation on her honour." Dr. Percy thinks this fact may have a medico-legal bearing, and will necessarily widen the margin to the ordinary term of pregnancy, granted to exceptional cases.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

AUSTRIA.

VIENNA, October 12.

THE SYPHILITIC CLINIQUE IN THE VIENNA GENERAL HOSPITAL.

A FEW particulars on the management of the wards for venereal diseases in the General Hospital of this city, which are under the care of Professor Sigmund, may be of some interest, as I believe it to be entirely different from that in the London and Paris Hospitals, with which latter your readers are, no doubt, acquainted. I think I shall best succeed in giving you an insight in matters as they are managed here, by making you accompany the Professor on one of his daily rounds through his clinique.

Professor Sigmund makes the first visit to his patients at half-past six o'clock in the summer, and at half-past seven in the winter. The wards for females are visited first; to these no one is admitted "except on business," and the door leading to them is, therefore, always locked. On ringing a bell, a tidily-dressed nurse immediately opens the door and wishes the Professor good morning with the standing phrase "I kiss your hand." The door is then again locked, and we immediately arrive in the first of a suite of very large wards, containing from thirty to forty beds each, and which at once make a pleasant impression by their extreme cleanliness and order. In the first ward, the Professor's assistants, which generally number from four to five, are assembled; these give an account of new arrivals and other occurrences on the previous day. After this the patients are visited, and it is now that the nurses are allowed to lodge their complaints against disobedient and unruly patients. The latter may also tell of the sufferings they have endured from quarrelsome and careless nurses, and make such requests for themselves as they are anxious should be granted. The funniest things sometimes occur at this juncture; unfounded complaints, malicious calumniations are preferred, tears shed, and many rebukes administered. Indeed it is often difficult to calm the troubled waters and to decide who is right and who wrong. The Professor's time scarcely allows him to enter into minute details, and thus it frequently happens that in spite of all his love of justice and acute discernment a wrong judgment is given.

Of the two nurses to each room one has to sit up all night, and in the morning accompany the Professor and his assistants to the beds of such persons as are confined to their beds: she must give an account of the medicines administered, the number of inunctions made, the baths taken, and the bandages changed, etc. Professor Sigmund believes this proceeding to afford a control over the nurses, and his view is certainly confirmed by experience, as those who are inconsiderate and unreliable often make wrong statements, having forgotten what has been ordered. The patients are, at the same time, closely inspected and the necessary Medical manipulations made. One of the assistants enters everything of importance in the case book, while another prescribes at the desk the medicines ordered at the beds by the Professor, and the diet, of which printed schemata are at hand.

Those patients who are not obliged to keep their beds, are now ordered to get up at once, and to defile before the professor according to the numbers of their beds, and armed with a spoon, a charpie-brush, and medicine bottles; a proceeding which has an irresistible effect upon the risorius muscles if viewed for the first time, especially as the reason for this warlike procession is not immediately apparent. This does not arise from any wish to transplant the Austrian military spirit into the wards containing venereal girls, but is done in order that the same spatula which has just been used to press down a tongue covered with chancres, may not be afterwards introduced in a clean mouth. Professor Sigmund has therefore once for all ordered, that the handle of the table-spoon used by the patients in eating, shall be employed in the examination of the cavity of the mouth and the gums; and in order that there may be a certainty of knowing that the patients have really taken the medicines prescribed for them, they are made to swallow it under the eyes of the Physician. Before this rule was introduced, it often happened that patients threw away the medicine either from disgust or out of defiance. The actual wildness and licentiousness of the Viennese priestesses of Venus Vulgivaga, unless kept down by a strong hand, exceeds all imagination, and no Physician is likely to manage them who has not a little of the criminal judge in him.

The use of the long charpie-brush held by the patients is obvious. It is employed in cleaning the vagina or for introducing the tampon; and although not required in every case, still for order's sake every one must be furnished with it; and if a patient appears minus this implement, she is liable to some kind of punishment, of which more by and bye.

After the Professor has mustered the host waiting for him in fluttering expectation, after he has upbraided those who appear in soiled linen, and sent some to put on clean, the patients one after the other again according to the number of the beds, ascend a tribune to which steps lead on either side; for the purpose of having the diseased parts examined. The nurse is standing by the couch and gives the right position to those under examination, removes the charpie which lies on the ulcers between the labia and in the vagina, while an assistant introduces the speculum, cleans the vagina, if necessary makes an injection and introduces a tampon, while another makes notes in the case book. Condylomata which may be present are removed by the scissors or knife, papular eruptions are cauterised with a certain solution, unclean or ulcerated folds on the anus are cut off, abscesses opened and many other smaller operations made. Professor Sigmund only watches the doings of his subordinates, and scarcely ever touches the patients himself, so that the assistants have ample opportunity of acquiring skill in these operations. During this time profound quiet reigns in the room, which is only now and then interrupted by a thundering rebuke, to such patients as cannot hold their tongues.

As soon as the last of these virgins has left the couch, the Professor and his assistants walk to a large ground-glass window and the patients have now to walk in the usual order and uncovered down to the hip, past the Medical men; they are then made to turn round, bend the back, raise the head, now to lift the right and then the left arm. Any one entering the ward at this time, and unaware that it is the residence of syphilis, would probably imagine himself in the monster study of an artist, in which models were exhibiting themselves for painting or sculpture.

If it appears necessary that the whole body should be viewed, the nightgown, which is fastened round the loins by means of a belt, as well as the shirt which form the whole dress of these unfortunates, has to be taken off; but even this is not always sufficient; sometimes they must even ascend a chair, as only then a sufficiently strong light falls upon the loins and thighs to make it possible to discover the sometimes infinitely small papulæ and spots which are just in course of development. This is the most trying moment for these unfortunates, when even the most hardened prostitutes are disconcerted and blush; and those girls who have only begun such a life and have some feeling still left them, will probably never forget this moment. But as the cure of this dreadful disease is the first object and the examination of the entire surface of the body is indispensable to this end, the Physician must set aside any scruples of delicacy which may naturally arise in such cases. During this review those who are fit to be discharged are also mustered, as by order of the Government no one can leave the Hospital unless thoroughly cured; such as are not cured are only allowed to leave if they can bring a note from a Medical man known to Professor Sigmund, in which he undertakes to continue the treatment and not to lose sight of the patient until she is cured.

This review, during which nurses and patients give the Professor the opportunity of making useful remarks on duty, order, cleanliness, obedience, etc., is repeated in each of the five wards, a labour which it is only possible to get through in one and a-half or two hours, because the most thorough discipline exists, and every assistant and nurse have their special duties, from which there is no departing. Professor Sigmund is necessarily exceedingly strict, as without a certain

severity, order in these wards could not possibly be maintained. No one who has not held an appointment in these wards can appreciate the difficulties which beset the Physician at every step, on the part of about 150 women who are by nature licentious, petulant, malicious and wanton, and who have nothing to lose, and also on the part of the nurses, who are only too apt to neglect their duties and be lazy and idle. Strife continually goes on in these wards, and words are seldom sufficient to ensure peace, so that punishments, which may sometimes appear cruel, are indispensable. In many instances it is even necessary to inflict a more severe punishment than is perhaps commensurate to the offence, in order to maintain discipline. Thus unruly, quarrelsome and talkative persons are during the visit placed in the middle of the room, or they are condemned to stand for half an-hour with the face to the wall—a punishment which they dislike extremely. Such women as appear in soiled linen are made to stand on a chair in the middle of the room and are there exposed until the visit is over. Offences of a graver character are punished by one foot of the criminal being tied to the leg of a bedstead; and open disobedience, refractoriness and bold or perverse language, is punished by the loss of a part or the whole of the dinner. Many tears and prayers for forgiveness follow this sentence, for it is no easy matter for a young girl with a strong appetite to sit quietly by and see from thirty to forty of her companions enjoying their dinner and to get none herself. In cases where the health of the patient does not permit their being deprived of food, the forehead and cheeks are smeared with tar, and these unpleasant marks can only be removed by the express permission of the doctor.

Tar is also used as a means of correction in dirty individuals, with this difference only, that it is put on those parts of the body that are dirty; and even the gums, if not kept clean, are blackened down to the wisdom-teeth. Experience shows this to be a remedy of wonderful efficiency,—the girls thus punished rub and wash the parts with all their might in order to get rid of the tar, and with that, of course, disappears the dirt. Another punishment for dirty persons consists in their being sent out of the room in couples to rub one another well with soap, and then to show themselves to the Professor with the chest, back, face, and arms well lathered. They also dislike being sent into other wards, whereby they are separated from the acquaintances they have made. This transfer is also ordered if the ulcers of the patient do not heal. Professor Sigmund is of opinion that this is often caused by the nurse not taking sufficient trouble; and it is certain that the ulcers always heal a few days after the patient has been removed.

Such patients as prevent the cure of their wounds or ulcers by leaving their beds, in spite of reproof or warning, are fixed by means of leather belts with one or both feet to the bed,—a remedy which proves of the greatest use. It also often happens that individuals who wish to enjoy the lazy Hospital life a little longer, keep the wounds open intentionally. Such and others who, when suffering from gonorrhœa, practise masturbation during the night, and thus retard the cure or render it impossible, have the strait-waistcoat put on for a lengthened period, or their hands are tied to their beds.

I have with this by no means exhausted the code of punishments in use in Professor Sigmund's Clinique; they are also changed from time to time, like fashion; and it is sometimes necessary to invent new punishments, in order to act more effectually upon the perverted minds of the patients.

The largest contingent of venereal patients—among whom girls of thirteen and matrons of sixty are to be found—is furnished by individuals between sixteen and twenty-four years of age, who call themselves needlewomen, but whose real business is prostitution. The rest is recruited from servant girls, nursemaids, cooks and daily labourers; even respectable daily governesses, who are devoid of the means of paying for private treatment, stray into these terrible rooms, where, by the contact with those thoroughly corrupt, the last spark of shame and morality is often extinguished for ever. As all over Vienna, no end of dialects and languages are heard in these wards, among which, however, the Sclavonian predominate.

The rules for the reception of patients are extremely liberal, and for which the Government deserves great praise. With the exception of syphilitic patients, all others may be refused admittance; and if the former are unable to pay, they are received without a testimony of poverty, which is generally necessary in other cases. Even pregnant women on the eve of parturition are taken in, and remain in the wards until the labour pains set in, whereupon they are carried on a hand-barrow to the obstetrical wards, which are in the same building; and if possible, after the delivery has taken place, they are immediately brought back to the Syphilitic Clinique, the infant being handed over to the Foundling Hospital. Such cases occur so frequently, that one of the wards is almost entirely filled by pregnant and lying-in women. This facility for reception is a good preventive for the usually great devastations made in large towns by syphilis. A very original method of handing venereal girls over to Medical treatment here (and which would not prove very popular in England) is this: the police, from time to time, invade public places of amusement, and carry off every girl known to them; they are then brought to a Medical man for examination, and those who are healthy are again discharged, while those who are tainted are delivered up to the Wieden Hospital. Such patients are, however, never brought to Professor Sigmund's wards.

The nurses, who only receive ten florins (£1) a-month salary, and no board, can only live by now and then receiving presents from the patients; some of them have also private practice in syphilitic diseases in their leisure hours. Their service in Professor Sigmund's clinique is very hard. They have to shave the hair of the genitals of every fresh comer, have to clean the parts, to dress the ulcers of from thirty to forty patients two or three times a-day, to make injections, to keep the wards, the beds, and the patients themselves clean; and they have also to sit up every other night. Professor Sigmund also requires them to know the Christian and surname of every patient, the number of their beds, the mode of dressing, the injection, the number of baths and inunctions administered, etc. This is, however, not so difficult as might appear at first sight, and a good nurse is well able to do it. The Professor himself knows by heart the Christian and surname of all his 300 to 400 male and female patients, the number of the wards and the beds they are in, and the remedies prescribed for them; nay, in many instances, he knows the day of their entrance in the Hospital, the day on which a certain remedy has been discontinued, etc. If, however, his extraordinary memory should now and then fail him, he immediately refers to his pocket-book, in which a history of every case under his care is entered by him in short, cabalistic signs only intelligible to himself. He has, likewise, to remember the name, rank, disease, and treatment, of several hundred of private patients at a time.

The visit in the wards of the male patients is made in the same manner as in the female, only with this difference, that the patients, led by the attendants, come into a room specially appropriated for seeing them, where they are examined in a state of complete nudity. The male patients are not quite so troublesome as the females, as amongst the former there are many reasonable and decent young workingmen; but there are, of course, also drunkards, lazy fellows, etc., who can only be kept in order by severity. Frequent conflicts between the Professor and the patients are caused by the circumstance that the latter become tired of the dull life in the Hospital, and desire to be discharged before they are quite cured, which, of course, cannot be done. Such patients often try to escape through the windows or the water-closet. Of the punishments used in the wards for females, we have here only the withdrawal of the dinner and the strait waistcoat.

In conclusion, I will only mention that Professor Sigmund does not visit the wards both for females and males every day, but on alternate days; and in his absence his assistants go through the same proceedings as if he were present. In spite of all his severity, Professor Sigmund is full of kindness towards his patients; he is a very agreeable talker, and can tell no end of amusing stories. Besides his Medical knowledge, he is also possessed of practical philosophy, and has gained a considerable fortune. He is always active; if not occupied by practice, he writes scientific papers or is intent upon improving the mode of treatment of syphilitic patients, or examining the improvements proposed by others. His clinical lectures, which are given four times a-week, are very clear and intelligible, and are frequented by Medical men from all parts of Europe.

LIVERPOOL.

October 22.

The return of October brings in this town, as in London, a fresh seasen of Medical activity, and we have now the Medical Society and the School of Medicine in regular work again. With regard to the latter, the effect of the recent enactments of the Medical Council seems to have been to bring, last year, an increased number of Students, and to occasion some diminution in the number of those entering this October. I have heard, however, but one opinion, even from those whose material interests may be affected by the recently-made regulations, as to the wisdom of making them, and as to the beneficial effects likely to result from their being brought into operation.

The Medical Society commenced its present Session with an inaugural address, by Dr. Gee, on the 3rd inst., and the first meeting for regular Medical business was held on the 17th. The paper of the evening was by Mr. Steel, one of the Surgeons to the Ladies' Charity, on the subject of "Vaccination." He referred to the fact that in this country it seems that vaccination is, on the whole, worse performed than in any other, excepting France, and to the absence of any test in the examinations for Medical degrees as to the candidate's knowledge of the theory and practice of vaccination. He thought that it was to be regretted that the Medical Council had not been able to see their way to undertake the regulation of national vaccination as one of their duties, instead of leaving this purely Medical matter in the hands of the Privy Council. He then gave some details of the plan of vaccination adopted at the Ladies' Charity. It is usual to make five punctures from above downwards, leaving sufficient space between each to prevent the vesicles from becoming confluent. Care is taken that the point of the lancet shall be very sharp, and the amount of bleeding is not regarded as of much consequence. Unless four vesicles rise, the case is not considered a thoroughly satisfactory one, and great care is taken not to use lymph from ill-formed vesicles or from "rubbed arms." The occurrence of abortive vaccination is considered a positive evil, and one which often hinders its efficient performance afterwards,—children in whom it has taken place frequently proving insusceptible to the vaccine infection, though not being in a condition in which they can be regarded as protected from that of small-pox. The importance of such a vesicle as shall leave a genuine cicatrix, and the value of there being a multiplicity of them, was illustrated by reference to Mr. Marson's statistics of the death-rate in post-vaccinal small-pox, which show an inverse ratio between the number of genuine cicatrices existing on the arm and the fatality of the disease. Mr. Steel did not believe that there was any proof of the degeneracy of the infecting power of the lymph generally used. He had compared the effects of some lymph obtained direct from Mr. Ceely, who had originated a stock of it by vaccinating with matter fresh from the cow five years ago, with the effect of some of the ordinary matter in use at the Ladies' Charity, which has descended in unbroken vesicular succession from that supplied by Dr. Jenner fifty years ago, and found them to be equal in their efficiency. The transmission with vaccine lymph of any infection besides that of the vaccine he believed not to occur, the eruptions which are sometimes referrable to vaccination being due to the same kind of constitutional sympathy with local irritations which occasion the various eruptions accompanying dentition. In the preservation of the virus ivory points are preferred, as being most economical as to the quantity of matter and not being obnoxious to the risk of allowing the lymph to undergo any putrefactive change, which is very possible when it is preserved between plates of glass or in a stoppered bottle. In the discussion which followed, a strong opinion was expressed as to the value of the crusts of the vesicles for transmission to long distances, and some interesting facts were mentioned as to the period of incubation sometimes intervening between the insertion of the matter and the development of the vesicle. Mr. Byerly cited one instance in his own practice in which the vesicles appeared just two months after a child, then suffering from hooping-cough, had been vaccinated.

I should have mentioned that Mr. Steel defended, and I think quite rightly, the policy of the Government in appointing not only public vaccinators, but those who are empowered to grant certificates of proficiency in the art of vaccination.

From among the many important cases that have come under notice since my last letter, I select the following:—

At the Southern Hospital, the operation of staphyloraphy was performed in a case well worth record on account of the singular mode in which the palate was cleft. A boy, aged 11, was holding in his mouth one of those little circular tin whistles which have a hole in the centre, and a double rim to allow of the instrument being held between the teeth. A juvenile friend administered a blow upon the mouth with such force as to drive the whistle to the back of the throat, its edge completely cutting through the soft palate. The operation was performed eight or nine hours after the accident. Dr. Nottingham had also recently a case of strangulated femoral hernia in a man, aged 60, in whom the symptoms of strangulation were mild, and the hernia itself so solid as almost to give the idea of its being a glandular swelling or some other tumour. As the symptoms had, however, existed three days, the operation was performed, and the sac found to be almost filled with omentum, very tightly constricted at the neck of the sac, and then spreading out into a sort of mushroom shape, and at first concealing a small knuckle of intestine; this was readily returned, the omentum was cut off, and the patient did well.

At the Northern Hospital there is now a most interesting case of chylous urine, under the care of Dr. Waters. He was originally admitted as a surgical patient under Mr. Hakes, on account of some difficulty which he experienced in passing his water. The urine generally has, to the naked eye, the appearance of milk. It has a faintly urinous odour, and under the microscope presents a mass of globules, precisely resembling those of chyle, with mucous cells also. The patient complains now only of weakness, looks "as if he were lying in bed from simple idleness," and as yet no clue can be found to the cause of the condition of the urine. Careful observations are being made of the progress of the case, which may yet elucidate its true nature.

The following case of gunshot wound, for the particulars of which I am indebted to Mr. McCheane, presents many points of interest. On the 9th instant, at ten in the morning, a serjeant of Militia Artillery shot himself through the chest. He placed a short carbine loaded with ball, with its muzzle just below the left nipple, and its butt-end upon the floor; by stooping he managed to push back the trigger with his right hand. He was found with a large ragged wound, about the size of a crown piece, in the front of his chest, the edges of which were completely charred; the portions of his vest, shirt, and singlet, corresponding to this surface were burnt, and no portion of them could be found. There was also a valvular aperture opposite the middle of the axillary border of the scapula, through which the ball made its exit. He was collapsed, apparently sensible, breathing distressed; occasional cough, no spitting of blood; respiration audible in the upper part of the lung; pulse feeble, but regular; hæmorrhage free at first, but soon abated. A wet towel was placed over the wound, which relieved him by excluding the air. Stimulants were administered, and he was carefully removed to bed. During the night there was some expectoration of blood; he continued sensible, but never spoke, and died on the 10th, at eight in the morning. On a post-mortem examination, the left lung was found collapsed; in its lower lobe was a lacerated wound, one inch deep and two or three inches long, filled with bony spiculæ; a small quantity of blood in the cavity of the chest. The outer surface of the pericardium abraded and singed, but the sac entire. The fifth and sixth ribs, for several inches, completely smashed; muscles and pleura lacerated, except in a small interval between the two openings, in which it was intact. The ball seems thus to have traversed a very small portion of the chest, and to have occasioned far less structural damage than might have been expected.

A case of fatal poisoning with cyanide of potassium was related by Mr. Byerly, and some of the viscera exhibited, at the last meeting of the Medical Society. The person was found dead among the sandhills on the Cheshire side of the Mersey; a bottle and glass measure lay close beside him, and the position of the body, etc., gave the idea that death had occurred instantaneously. The most noticeable fact in the post-mortem appearances was the intense congestion of every organ examined. The portions of intestine, for example,

shown six days after death, were of a very deep port wine colour. The cavities of the heart were almost empty. The amount of the poison swallowed was uncertain.

Three cases of poisoning by fungi came, a short time ago, under the care of Mr. Wall. Some children playing in the Parliament-fields, ate a small portion of an Agaricus, of what species I am not at present able to say, and passed shortly into a somewhat alarming condition. When seen by Mr. Wall, all three presented excessive dilation of the pupils, the pulse was slow, the surface of the body cold, strange movements of the arms and hands. The patients could walk pretty well, there was no sickness, and no sign of pain in the countenance, the expression of which was happy and smiling. An emetic of sulphate of zinc brought away the contents of the stomach, among which very few fragments of the fungi were discoverable; and it seems probable that but a very small portion had been swallowed. The poisonous effects soon passed off.

A curious case of "amputating ulcer" is now in the male Surgical ward of the Workhouse Hospital. The patient, aged 77 years, perceived, about six months before admission, a black spot over the metacarpo-phalangeal articulation of the left forefinger; this he says came into a sore, which he doctored himself for a long time, and then went to a bone-setter, who attempted to cure it with plasters, but with no better success than had attended his own efforts. On admission, the forefinger was found to be almost detached, the skin, muscles, and bone having ulcerated through, leaving the finger, which itself looked perfectly sound, attached only by the flexor tendons and a few filaments of nerve and vessel. The tendons being cut through, the other fragments of tissue yielded to very moderate traction, and the finger was thus removed. No vessel required ligature, the very slight oozing of blood which followed being easily arrested by the application of dry lint. He is now using a lotion of nitric acid and opium, and taking good food and stimulants; but the further history I hope to be able to give in my next communication.

GENERAL CORRESPONDENCE.

CASE OF LEAD POISONING CAUSED BY THE USE OF SNUFF.

LETTER FROM DR. CREGEEN.

[To the Editor of the Medical Times and Gazette.]

SIR,—The subject of poisoning by the use of adulterated articles is one of more universal interest than that of ordinary poisoning, whether accidental or intentional, as the former affects the health and well-being, if not the lives, of the entire community, whereas the latter is limited to isolated cases, happily few and far between. Poisonous adulterations, too, assume such Protean forms that it behoves us to be always on our guard; and any new landmarks pointing to dangers ahead, or of many hitherto unassignable causes of chronic disease, may not be entirely unacceptable. The following singular case of lead poisoning, produced by snuff-taking, may, therefore, deserve to be recorded in your valuable Journal,—an authority on all matters connected with public hygiene, and whose *dicta* are readily appreciated by the public at large:—

Mrs. S., aged 60, the wife of a carpenter, of bilious temperament, came under my care about three months ago. Her history was, that she used to be remarkably stout, strong, and healthy, with the exception of "bilious attacks," until the last few years, when her general health began to fail, during which period she has suffered from repeated attacks of pain in the liver, and over the bowels, with constipation. She has gradually continued to get worse with each attack, until she is now a mere shadow of her former weight of fourteen stone. She has been under several Practitioners, and has been bled, leeched, blistered, salivated, etc., but only with temporary benefit, her "liver complaint," as she termed it, recurring with increased violence each time.

Her appearance on coming under my care was that of malignant cachexia,—dark, sallow, yellowish, indicative of mal-assimilation and great suffering. Severe pain, which was aggravated every few minutes, and tenderness over the abdomen, but over the transverse colon and liver more especially felt. The pulse was regular and tongue clean, but around the few teeth she had remaining, which were in the lower jaw, the characteristic blue margin of the gums was well marked.

No questionings and examinations could elicit on this occasion any clue as to the origin of the introduction of lead into the system. By means of anodynes, aperients, counter-irritants, alteratives, and tonics, the patient was restored in three weeks to what she termed her "usual condition." Two weeks ago she came under treatment again for a similar attack, with the addition of a slight degree of paralysis of the hands, one rather more than the other. This she attributed to rheumatism, which used, she said, to trouble her.

Having now a strong conviction that the first cause of her suffering still continued in full force, and finding that no other members of her family were similarly affected, suspicion at once fell upon the snuff, which, judging from her physiognomy, she must be in the habit of using. Accordingly, a sample of the kind she ordinarily used was procured, and this gave evidence of the presence of lead. However, to make the matter more clear, a larger sample was forwarded to Professor Taylor, who, in the most courteous manner, sent the following obliging reply:—

"15, St. James's-terrace, Regent's-park,
September 13, 1861.

"Dear Sir,—I have made an analysis of the sample of snuff which you sent to me, and I find that it contains a large quantity of lead. This is quite sufficient to account for the symptoms under which your patient is labouring. Of course the snuff should be immediately withdrawn, and diluted sulphuric acid, lemonade, with diuretics, such as occasionally small doses of iodide of potassium, given.

The case appears to be a very plain one, and your suspicion of the poisonous nature of the snuff is quite correct.

"Yours faithfully,
"ALFRED S. TAYLOR.

"J. J. Cregeen, Esq., M.D."

She commenced taking snuff many years ago for severe headache, but has not used any since the discovery of its deleterious adulteration, and she is now rapidly recovering.

As I am not aware of any cases of this kind on record, I should feel great interest in any communication on the subject of poisoning arising from the deleterious adulteration of snuff.

I am, &c.
J. J. CREGEEN, M.D., F.R.C.P.E., etc.
Plough-road, Rotherhithe, September 17, 1861.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, OCTOBER 15.

DR. COPLAND, President, in the Chair.

(Continued from page 419.)

DR. MURCHISON exhibited

A SPECIMEN OF PERFORATION OF THE SIGMOID FLEXURE FROM A CASE OF TYPHOID FEVER.

The patient, a female, aged 26, died after an illness of nearly two months' duration. She had only been under observation during the last four or five days of life, and her symptoms at that time were those of acute peritonitis, accompanied by great prostration and urgent fæcal vomiting without constipation. Considerable doubts existed as to the diagnosis of the case, as no account could be obtained of the patient's history before admission. After death, a perforation was found at the lower part of the sigmoid flexure, communicating with a circumscribed fæcal abscess in the pelvic cavity. The upper two yards of the small intestine were enormously distended with flatus and fluid fæces; the lower part of the small intestine and the whole of the colon were empty and very contracted. There was no disease of the mucous membrane of the ileum at the point where it suddenly changed its calibre, but one of its coils was here adherent to the circumscribed peritoneal abscess above mentioned. Distinct cicatrices and healing typhoid ulcers were found in Peyer's patches, and in the solitary glands of the colon. The mesen-

teric glands were considerably enlarged, but not softened. Dr. Murchison observed, that while perforation of the small intestine was a very common accident in typhoid fever, perforation of the large bowel was very rare. Of the four cases which he had found recorded by Chomel, Forget, and Brinton, in two the perforation was situated at the junction of the transverse with the descending colon, and in the two others its site corresponded with that of the case brought before the notice of the Society.

Dr. Murchison likewise presented a specimen of

CANCEROUS LIVER, WHERE DEATH RESULTED FROM HÆMORRHAGE INTO THE PERITONEUM.

The patient was a man, aged 50. The immediate cause of death had been the rupture of a softened cancerous nodule on the upper surface of the liver. The peritoneum was found to contain several quarts of bloody serum, with flakes of coagulated blood, and on the upper surface of the right lobe of the liver, between it and the diaphragm, was a mass of dark coagulum, which weighed five ounces, and which adhered at one part to the above-mentioned ruptured nodule. Dr. Murchison remarked that the only similar case which he had been able to find on record was reported by Frerichs in the second volume of his work on Diseases of the Liver.

Dr. Frederick Robinson exhibited a specimen of

ANEURISM OF THE ARCH OF THE AORTA WHICH TERMINATED FATALLY BY ULCERATION INTO THE TRACHEA.

This occurred in a soldier of the Fusilier Guards, aged 39, who had been under treatment several weeks for an affection simulating very closely ordinary chronic bronchitis—a complaint common to men of lengthened service, and consequently impaired constitutions. He expectorated frothy mucous sputa abundantly, and large moist crepitation was audible over both lungs anteriorly, but no morbid sounds in the circulatory system, dulness of chest, nor, in fact, any one symptom that could be considered pathognomonic of aneurism was present. There was no swelling of the tissues or congestion of the veins of the neck; the pulse was regular and weak in both arms, and no pain in the chest, back, or vertigo were experienced. The dyspnœa was not greater than usual, and occurred in paroxysms of an asthmatic character. One evening, when dressed, out of bed, and in the act of getting his tea, his mouth filled with arterial blood; he vomited a large quantity and expired instantaneously. The heart was rather small, and some atheromatous deposit was found in the aortic valves, but not to an extent to impede their function. The aorta throughout was much diseased, the coats thickened, and studded with large patches of atheromatous matter.

MEDICAL NEWS.

Royal College of Physicians of London.—At the Comitia Majora held on Tuesday, October 22, the following gentlemen, previously Extra-Licentiates of the College, were admitted Members:—

Burn, George, R.N. Hospital, Haslar
Battersby Robert, M.D.
Green, William Abbott, Punjab
Robertson, William Tindal, M.D., Nottingham.

At the same Comitia the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Barford, James Gale, Wellington College, Berks
Bird, Samuel Dougan, M.D., Richmond, Surrey
Dunean, Thomas, M.D., Richmond, Surrey
Dukes, Major Charles, Melbourne, Victoria.
Elwes, Charles Walter, North-cresent, Bedford-square
Edwards, Thomas Edwin, 28, Gloucester-crescent, North, W.
Harper, Joseph, Great Torrington, Devon
Hicks, John Wale, St. Thomas's Hospital
Howell, Horace Sydney, Maidstone
Ingle, Robert Nicholas, Melbourne, Derbyshire
Mason, Charles Ignatius, Surbiton
Rugg, George Philip, M.D., Kennington.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, October 17:—

Dias-Baudernayke, Abraham William, Ceylon
Stawman, William, Sheffield
Warburton, Alfred, Liverpool.

The following gentlemen also on the same day passed their First Examination:—

Gimblett, John, Taunton
Milsome, John Ruddle, St. Bartholomew's Hospital
Wilson, James, General Hospital, Birmingham.

APPOINTMENTS.

Anthony.—John Anthony, M.D., M.B., and Lic. Med. Cantab., M.R.C.P. Lond. (exam.), has been elected Physician to the Birmingham and Midland Free Hospital for Sick Children.

Berry.—Samuel Berry, L.R.C.P. Edin., F.R.C.S. Eng., L.S.A. Lond., has been appointed Consulting Surgeon to the Birmingham and Midland Free Hospital for Sick Children.

Cornwall.—John Cornwall, M.R.C.S. Eng., L.S.A. Lond., has succeeded Charles Young, of Chilton, M.R.C.S. Eng., and L.M., L.S.A. Lond., as Medical Poor-Law Officer for the Polden District in the Bridgwater Union, Somersetshire.

Davies.—Morris Davies, of Carnarvon, L.R.C.P. Edin. (exam.), M.R.C.S. Eng., L.S.A. Lond., has been elected Medical Officer for the Llandwrog District in the Carnarvon Union.

Gairdner.—John Gairdner, M.D. Edin., F.R.C.S. Edin., has been elected Treasurer, for the ensuing year, to the Royal College of Surgeons, Edinburgh.

Garrard.—Stamp Garrard, M.R.C.S. Eng., L.S.A. Lond., has been re-elected Poor-Law Medical Officer for the Districts of Stoke Golding and Wolvey, in the Hinckley Union, Leicestershire.

Graves—Ryves William Graves, F.R.C.S. Eng., L.M. Dub., has been elected Surgeon to the Gloucester Infirmary.

Grime.—Henry Ainsworth Grime, L.R.C.P. Edin. (exam.) M.R.C.S. Eng., L.S.A. Lond., has been elected Medical Officer for District No. 1 and the Workhouse of the Blackburn Union, Lancashire.

Hammond.—Samuel Hammond, L.R.C.P. Edin. (exam.), M.R.C.S. Eng., L.S.A. Lond., has been elected Medical Officer for District No. 2 of the Aylsham Union, Norfolk, and for the Aldborough District in the Erpingham Union.

Heslop.—Thomas Pretious Heslop, M.D. Edin., M.R.C.P. Lond., M.R.C.S. Eng., has been elected Physician to the Birmingham and Midland Free Hospital for Sick Children.

Howkins.—Mr. Thomas Howkins has been appointed Surgeon to the Birmingham and Midland Free Hospital for Sick Children.

Hutchinson.—George Smith Hutchinson, M.R.C.S. Eng., and L.M., L.S.A. Lond., late Assistant-Surgeon to the Jenny Lind Infirmary for Sick Children, Norwich, has been elected Surgeon.

Inglis.—Archibald Inglis, M.D. Edin., F.R.C.S. Edin., has been elected Librarian, for the year, to the Royal College of Surgeons, Edinburgh.

Johnstone.—James Johnstone, M.D. Cantab., F.R.C.P. Lond., has been appointed Consulting Physician to the Birmingham and Midland Free Hospital for Sick Children.

Mason.—Francis Mason, M.R.C.S. Eng., has been elected one of the Assistant Surgeons to King's College Hospital.

Muriel.—Charles Evans Muriel, M.R.C.S. Eng., and L.M., L.S.A. Lond., has been elected Assistant-Surgeon to the Jenny Lind Infirmary Norwich.

Newbigging.—Patrick Small Keir Newbigging, M.D. Univ. Edin, F.R.C.S. Edin., has been elected President of the Royal College of Surgeons, Edinburgh.

Palfrey.—James Palfrey, M.D. St. And., L.F.P.S. Glasg., L.M. Glasg., L.S.A. Lond., has been appointed one of the Assistant-Physicians to the Metropolitan Free Hospital, Devonshire-square.

Power.—John Hatch Power, M.D. Glasg., F.R.C.S. Irel., Professor of Surgery in the Royal College of Surgeons, Ireland, has been elected a Member of the Council of the College.

Robinson.—Edmund Robinson, of Birmingham, M.R.C.S. Eng., L.S.A. Lond. (May 1861), has been elected Resident Surgeon to the Birmingham Workhouse.

Sharman.—Malim Sharman, M.R.C.S. Eng., L.S.A. Lond., has been elected Surgeon to the Birmingham and Midland Free Hospital for Sick Children.

Tuck.—Buckmaster Joseph Tuck, of Seaford, Sussex, M.R.C.S. Eng., L.S.A. Lond., late House Surgeon to Guy's Hospital, has been appointed Poor-law Medical Officer and Vaccinator for the third District of the Eastbourne Union, Sussex.

Tucker.—John Cornish Tucker, M.R.C.S. Eng., L.S.A. Lond., has been appointed Assistant House Surgeon to the General Hospital, Nottingham.

Winter.—William Thomas Winter, M.R.C.S. Eng., L.S.A. Lond., has been appointed Demonstrator of Anatomy at the Bristol Medical School; and Surgeon to the new (Fourth) District of the Bristol Dispensary,

Yates.—George Yates, M.R.C.S. Eng., L.S.A. Lond., has been elected one of the Acting Surgeons of the Birmingham and Midland Free Hospital for Sick Children.

DEATHS.

Caudle.—August 21, at Epsom, Bendigo, Australia, Dr. Edward Caudle, formerly of Brighton, Sussex, aged 47.

Field.—October 13, William Field, of Tong-street, Bradford, Yorkshire, L.S.A. Lond., aged 47.

Kennedy.—October 12, at Camden-street, Dublin, of fever, Mr. P. S. Kennedy, Student of Medicine.

M'Kellar.—August 12, at Lake Innes, Port Macquarie, New South Wales, Charles Kinnaird M'Kellar, aged 41.

Robertson.—October 10, John Robert Robertson, of Felton, Northumberland, M.D. Univ. Edin., L.S.A. Lond., aged 26.

ROGERS.—August 29, on board H.M.S. *Racer*, John Rogers, Assistant-Surgeon of H.M.S. *Mersey*.

TOVEY.—October 17, Henry Lacocke Tovey, of Swiss-cottage, Carisbrooke, Isle of Wight, M.R.C.S. Eng., L.S.A. Lond., (retired) aged 59.

WITHERS.—August 2, at Shanghai, China, Frederick John Withers, M.R.C.S. Eng., L.A.H. Dub., L.M. Rotunda Lying-in Hospital, Assistant-Surgeon to H.M. Screw Steam-Ship *Encounter* (seniority, September 23, 1859).

CHOLERA IN INDIA.—The Indian Government has appointed a special commission to inquire into and report on the recent severe outbreak of cholera among the European troops at several stations in the north-west provinces, and at Meean Meer. The members are Mr. Strachey, of the civil service; Dr. Linton, C.B., and Dr. M'Clelland, Inspectors-General of Hospitals; Lieutenant-Colonel Gawler, and Major P. Stewart.

DEATH OF MR. TAGERT, OF DUBLIN.—On the morning of the 14th inst., Mr. William Tagert, the contemporary and fellow-student of Cusack, Marsh, Porter, Harrison, and Montgomery, expired at his residence in Camden-street, after a painful and protracted illness, in the sixty-eighth year of his age. As an Hospital Surgeon and School Lecturer—positions which he filled for a vast number of years with the most unexampled success—he did much to elevate the character of Irish Surgery. It was not only as a Lecturer that Mr. Tagert held a prominent position. He was also a most finished and accomplished Surgeon, ever ready to accord advice and assistance to his junior brethren when in difficulty; and this he did with no pretension to affected superiority, but with a kindness and wish to oblige, calculated to render the favour conferred still more invaluable.

GUY'S HOSPITAL.—Mr. Francc has resigned the post of Ophthalmic Surgeon at this Hospital, after holding it for upwards of eighteen years. It is proposed to appoint him Consulting Ophthalmic Surgeon. The accommodation for Surgical cases having been recently increased, it is in contemplation to appoint Mr. A. Poland, at present the Senior Assistant-Surgeon, to the office of full Surgeon, in addition to the three already on the staff, giving him, at the same time, the general superintendence of the Ophthalmic Department. By this arrangement there will remain two vacancies to be filled,—namely, Assistant-Surgeon and Assistant Ophthalmic Surgeon.

ROYAL COLLEGE OF SURGEONS.—From the annual return of the receipts and expenditure of the Royal College of Surgeons of England, from Midsummer-day, 1860, to Midsummer-day, 1861, it appears that the receipts amounted to £13,894 10s. 4d., principally from the following sources:—Diplomas for membership, £10,983; rent, £627 1s. 8d.; fellowship, £525; certificates in Dental Surgery, £451 10s.; licences in Midwifery, £138 12s. The expenditure amounted to £13,581 14s. 1d., divided under the following heads:—*College Department*—£8831 15s. 4d., including Council, Court of Examiners, Dental Board, Midwifery Board, Auditors, Fellowship, Diploma stamps, salaries, wages, etc.; *Museum Department*—£2278 2s. 2d., including catalogues, specimens, salaries, wages, etc.; *Library Department*—£594 10s. 6d., including purchase and binding of books, salaries, etc. The receipts having been £13,894 10s. 4d., and the disbursements £13,581 14s. 1d., there remain £312 16s. 3d. to be added to the College funds. The receipts last year amounted to £22,307 9s. 8d., and the disbursements to £21,906 18s. 3d.

VITAL STATISTICS OF LONDON.

Week ending Saturday, October 19, 1861.

BIRTHS.

Births of Boys, 954; Girls, 892; Total, 1846.
Average of 10 corresponding weeks, 1851–60, 1605·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	557	508	1065
Average of the ten years 1851-60	519·3	526 3	1045·6
Average corrected to increased population..	..	..	1139
Deaths of people above 90	..	3	3
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	..	15	2	5	2	3
North ..	618,201	..	2	22	5	5	3	4
Central ..	378,058	..	..	18	2	6	7	7
East	571,129	5	..	12	4	9	16	10
South ..	773,160	1	..	20	4	11	8	10
Total.. ..	2,803,921	6	2	87	17	36	36	34

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

ORIGINAL COMMUNICATIONS.

The following list of Papers which have been long waiting for insertion will, we trust, be considered as an apology to many valued contributors for unavoidable delay in the appearance of their writings, and also as an additional reason why brevity should be considered as one important character of articles intended for a weekly journal. We are repeatedly obliged to postpone very long papers *sine die* from simple inability to find room for them.

The Pathology of Asthma. By Dr. Hyde Salter.
Five Cases of Ovariotomy. By Mr. Spencer Wells.
Case of Epilepsy. By Dr. Gray.
Death from Chloroform. By Dr. Marcet.
Clinical Midwifery. By Dr. Robert Lee.
Foreign Body in the Orbit. By Mr. Wordsworth.
Cases of Excision of the Knee-joint. By Mr. Nottingham.
Cases of Puerperal Peritonitis. By Mr. Candy.
Fatty Degeneration. By Dr. Corfe.
Spontaneous Obstructions of the Femoral Artery. By Mr. Leith Adams.
Case of Diseased Pancreas. By Dr. Marston.
Influence of the Sympathetic Nerves and Ganglia on Voluntary Muscles. By Dr. Remak.
Sanitary Condition of the Russian Army. By Mr. J. Michell.
On Azoturia. By Dr. Thudichum.
Epidemic Cholera. By Dr. McCormac.
Purpura Hæmorrhagica. By Dr. Wood.
Cases of Stone. By Mr. Armstrong Todd.
Case of Tracheotomy. By Dr. Dobbie.
Statistics of Compound Fractures. By Dr. Marston.
Use of Iron in Phthisis. By Dr. Jones.
Cases from the Children's Hospital, Liverpool. By Dr. Stephens.
Phenic Acid in the Cure of Scabies. By Dr. Burton.
Case of Injury to the Throat. By Dr. Grabham.
Milk Abscess. By Dr. Ussher.
The Climate of Egypt. By Dr. Patterson, Cairo.
Case of Strangulated Hernia. By Dr. Houseman.
Case of Hydatid Tumour. By Dr. Burton.
Case of Spina Bifida. By Mr. Sheldon.
New Form of Fungus Disease. By Dr. Carter, Bombay.
Case of Sciatica. By Dr. Wilkinson.
Cases of Stricture of the Urethra. By Dr. Hartley.
New Cure for Trichiasis, etc. By Dr. Williams.
On the Treatment of Goitre. By Dr. Greenhow.
Melanotic Encysted Tumour Simulating Bronchocele. By Dr. McCraith, Smyrna.

Mr. Blake's case shall appear.

Subscriber.—*J. P.*—The fee for attending an inquest is one guinea, and one guinea additional for a post-mortem examination, if one be ordered.

A Rifleman.—Great muscular strength is one evidence of good health, but it by no means confers an exemption from disease. Hippocrates dissuaded from too high a course of training. Moderation is a good principle, in training as in all other things.

The Accident at Sherborne.—No blame seems attributable to Mr. White, who came to see the patient as soon as he could, and did not bring instruments, because the note requesting him to bring them was written in pencil and obliterated by the clammy hands of the fellow that carried it.

C. D.—We do not know whether abstinence from drink will cure a cold in the head. It was recommended some years ago by an eminent Physician, but we do not know whether his subsequent experience still induces him to recommend it. The watery discharge from the nostrils is not the worst part of the malady, and there would be abundance of unpleasant symptoms if that were dried up.

A Subscriber.—In reference to the notice last week that the Widows' and Orphans' Society are about to alter their laws again, we have been requested to say that "The only alterations of importance to be proposed now, are such as were proposed in 1855, but were not then carried, not on account of any dislike then to the alterations now proposed, but owing to an objection being taken to some other part of the same paragraph, which of course led to the refusal of the whole proposed new law. It seems hard to object to the extending the limits of the Society in Surrey, Kent, and Essex to something equivalent to the distances already in the limits, if in Middlesex. It appears wrong to elect a man living at Staines, or at South Mims, while it is refused absolutely to elect one living at Mortlake or at Barking. Again, no one will take a child as an apprentice at fourteen years of age, few will at fifteen but many would at sixteen. It is proposed, therefore, to extend the age to fifteen, as that at which the half-yearly relief should cease, and to sixteen for obtaining an apprentice fee."

Baron de Brogneville has sent us a long letter complaining of the mismanagement of the Maison Impériale de Santé de Charenton (near Paris), which, he says, is not only used for confining madmen, but where also young gentlemen of rank, who wish to marry "pretty horsebreakers," are sent by their relatives in order to learn wisdom. The Baron has himself been of this number, and as he is "to-day thankful to his uncles for having sent him there," the condition of the Asylum is probably not so bad as he would wish us to believe.

How the Homœopaths get on!

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—A journal with a very large circulation, the *London Review*, published the other day some most revolting details of about fifty filthy things used as drugs by what it is pleased to term the Allopathic School; —viz. album græcum, the dung of animals, etc., copied by some illiterate knave out of books at the period of the Alchemists. An effort was made in one or two letters to show the readers of that journal that album græcum, the dung of animals, etc., are now no more used by Physicians than the thumb-screws in the Tower.

If you will excuse these filthy words which have disgusted a large portion of the public, as regards Allopathy, I would only here add that "tincture of bugs" is now an acknowledged medicine of the Hahnemannites, though in the letters aforesaid it is sought to be shown that chastity itself, moonbeams, or morning dew, are not so pure as their "mother tinctures."

I am, &c.

October 14. X. Z.

"Dr." Lesser.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As it does not appear from Dr. Altbaus' statement concerning "Dr. Lesser," that I never recommended to him the individual in question, I take the liberty of declaring it hereby. But what I chiefly wish to impress upon my Professional brethren is the necessity of applying for information to the countrymen of what often will turn out to be a Medical impostor. This, at least, is my practice invariably *vis à vis* of "starving assistants with a family," "health-broken country Practitioners," etc. etc.

I am, &c.

Artillery-place, October 17. A. Hess, M.D.

The "Ossified Man."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am able to answer the query of your Correspondent "J. D." in your Journal of October 12, by sending to you the following extract, from a Lecture delivered at the Norwich Hospital, February 6, 1832, by my father, and which I have copied from his manuscript notes in my possession.

He says:—"Some remarkable instances are to be found in the archives of our Science, where the muscles have been extensively converted into bone; the most astonishing case is to be found recorded in the Philosophical *Transactions* (see Mihles' 'Collection of Medical Papers from the Philosophical *Transactions*," vol. ii., p. 425,) where the muscles and ligaments were so extensively converted into bone, as to fix nearly all the joints, even the vertebræ and ribs, head, and lower jaw; in short, this man was one entire bone, from his head to his knees, the only joint at all moveable before death being the right wrist and the knees, but so little movement allowed that 'when set upright he could in about a quarter of an hour move a foot forward.' This skeleton (Mr. Crosse proceeds to state) is still preserved in the Museum at Trinity College, Dublin, and was under my care whilst Demonstrator of Anatomy there, so that I can speak from observation, though the case occurred nearly a hundred years ago; and I assure you the muscles about the scapula, and upon the dorsum ilii (the glutei muscles) are converted into great masses of bone, equalling the muscles in thickness and bulk; indeed, half the muscles of the hips and thighs must have been converted into bone. This is held to be so great a curiosity, that the porter pockets many a fee annually from strangers who visit the Museum principally to see what is emphatically designated 'the Ossified Man.'"

I am, &c.

Norwich, October 17. Thos. W. Crosse.

Butchers' Use of Chloroform for Killing Animals.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The recent letters on the use of chloroform in killing animals, to save them the horrible cruelties practised at such places as Newgate Market, though an old subject, is one that must have set many humane persons thinking. We have got rid of opaque smoke in our cities by such an apparently incongruous thing as an Act of Parliament; as also that fell disease, chimney-sweeps' cancer, by the Legislature prohibiting climbing boys; as also the ravages of small-pox by Legislatorial vaccination, etc. The expense of chloroform, I fear, will be always a bar to its use by butchers; but what I would propose is carbonic oxide and carbonic acid. Let it be enacted under a small fine, that in every establishment killing over ten sheep or pigs in a week, that the poor animal, previous to being slaughtered, shall pass from the other herd of sheep or pigs, as the case may be, to the butcher's hand through a small close closet or apartment in which a pan of charcoal is actively burning; a small window would tell when the poor animal was observed to fall insensible, the animal might then be drawn up with a cord previously attached to it out of this closet or underground kitchen, and killed.

I believe such an animal thus killed would differ in nothing from animals killed as at present; it might be three or four pounds heavier which would pay the expense of the process ten times over; but I am not so sure about chloroform or ether, as where these are used little glistening particles of fat are found in the blood, probably taken from the lung or other tissues through which these agents (so certain to dissolve fat) must pass before getting into the system. Another reason is this: It has been alleged in midwifery cases, where much chloroform is given, that the infant put to the breast to suckle is affected by chloroform in the milk, at least for the first twelve hours or so. Carbonic acid is free from these objections, cheap, and on a level with the ideas of Parliament men.

I am, &c.

Sackville-street, October 14. Charles Kidd, M.D.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The remarks of your Correspondent "Humanitas," as to the killing of sheep in Newgate Market, prove, with many other facts of the kind, what little thought or feeling is often exercised towards the creatures God has given to us for our use and sustenance. I can believe that "Humanitas" and many a hearty good fellow or tender lady would look upon the tempting sirloin and mutton-cutlet with much less satisfaction for knowing these disturbing secrets of the slaughter-house. Paris has its *abattoir*, so might all towns under regulation. To know that the creature we devour has come by its death under the legitimate influences of humanity must surely be the better for digestion. Chloroforming animals for food would probably be too tedious and uncertain, and would probably excite prejudice; a blow on the head to stun has also objections as to missing, or the miserable work of dragging the animal up to receive the blow; a dexterous cutting through near the head of the medulla oblongata we know has been practised with humanity and success, and sticking after, and why not eligible? Pigs are largely killed in Ireland, and sometimes in England by a rope attached to the hinder leg and swinging piggy up by means of a pulley, with his head downwards, when he can be conveniently stuck or stunned. Could not sheep or oxen be killed in this way by rope and pulley, etc.? Such a method would seemingly have as much good butchery over that commonly practised as Rarey's simple science over the old barbarities of horse-breaking—the putting an animal that is to die in knowledge and dread of its death, with its struggles, before those of dying, is revolting to any sensible and humane person.

I am, &c.

One of the Animal's Friend Society.

COMMUNICATIONS have been received from:—

Dr. Jenner; Dr. R. Lee; Dr. E. Smith; Dr. Greenhow, Segowlee, Bengal; Dr. Merriman; Dr. Croft; Dr. Lalor; Dr. Chalmers; Mr. Le Gros Clark; Mr. W. Adams; Mr. Soelberg Wells; Mr. Blake; Mr. Porter; Mr. Shields; Mr. Bell; Mr. Copney; Mr. Shields; Mr. Spaull; Mr. Cooper; Mr. Saunders; the Rev. H. Moule.

APPOINTMENTS FOR THE WEEK.

October 26. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

28. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Medical Society of London, 8½ p.m. Dr. Althaus "On Certain Points Connected with the Nature and Action of Mineral Waters."

29. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

30. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Dr. Stephen H. Ward "On Some Cases of Aneurism of the Aorta, and Arteria Innominata."

31. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

November 1. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Western Medical and Surgical Society of London. Council Meeting, 7 p.m. Dr. Anstie "On the Proofs of Live-birth in Relation to the Crime of Infanticide," 8 p.m.

ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT
The Grosvenor Place School of Medicine,
DURING THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.,
Surgeon to the Royal Orthopædic and the Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital.

LECTURE III. *(Continued.)*

LORDOSIS IN DORSAL REGION.

Lordosis may also occur in the *dorsal region*, but to a much less extent than in the lumbar region. Here it is frequently met with as a consecutive condition to caries, or destructive disease, after angular curvature has been produced either in the lower cervical, or in the lower dorsal and lumbar regions. Above or below the seat of disease, a flattening, and sometimes a deep sinking-in of the dorsal vertebræ frequently occurs. No Surgical importance, however, attaches to this form of curvature, but there is another form of *lordosis* occurring in the dorsal region, of considerable importance in a diagnostic point of view, to which I would especially direct your attention. I allude to the sinking-in or depression of the spinous processes, which occurs in the dorsal region in some cases of double lateral curvature of the spine.

There is, at the present time, in the Hospital, under my care, a girl, aged 15, from Northumberland, in whom this form of lordosis exists in an unusually severe degree; the curvature is said to have commenced about five years ago, and its increase has been rapid. She is not short in stature, neither does she present any indications of the rachitic development; excepting the curvature of the spine, she is well-formed, stout, and muscular, with every appearance of good health and strength—ruddy complexion, etc.

In this case, the posterior projection of the angles of the ribs in the dorsal region on the right side corresponding to the convexity of the upper curve, and of the transverse processes of the lumbar vertebræ on the left side, exists to an unusual extent, and as I shall presently explain to you, most certainly indicates a very severe degree of rotation of the bodies of the vertebræ, and therefore a larger internal curvature. The external lateral curvature, as judged of by the lateral deviation of the apices of the spinous processes, is not severe. Such cases are frequently considered to be of a rachitic nature, but in the present instance I see nothing to support such an assumption, nor have I in many similar cases, which have been under my care, unless it be admitted that rickets sometimes only attacks the spinal column. To this I should be unwilling to assent, if only from a consideration of the fact which I have frequently noticed, that even in the very worst cases of rickets, evidenced by all the peculiarities in the skeleton characteristic of this affection, there is no disposition to lateral curvature of the spine until obliquity of the pelvis has been produced by long-continued irregularity in the length of the legs from curvature of the long bones, and also by a bad mode of walking, induced by deformity of the feet,—rachitic valgus. Lateral curvature of the spine is evidently the last deformity in the order of time which occurs as the result of rickets, though I believe the opposite opinion is generally entertained. In all the worst cases of rickets in children now under my care, the spines are quite free from any lateral deviation—lordosis to some extent in the lumbar region only existing.

The *lordosis* in the dorsal region, then, of which we were speaking, I am unable to trace either to the rachitic or any other constitutional cause; but the surgical interest which attaches to this deviation arises, not from its existence in severe cases of lateral curvature, but from the fact that it frequently occurs before any lateral deviation of the spinous processes takes place, and therefore before any lateral curvature has become obvious externally. In such cases, some slight prominence of the shoulder is generally the reason of the Surgeon being consulted, and finding no lateral deviation of the apices of the spinous processes, he usually gives a favourable opinion of the case. The *lordosis* probably does not amount to more than a loss of the natural posterior curvature of the spine in the dorsal region, *i. e.* a flattening of the back, and a straight appearance of the spine, which he regards as of no importance. Now, my reading of such a case would be that the prominence of the shoulder depends upon slight rotation of the bodies of the vertebræ, and that *internal curvature* of the spine already exists. Some additional confirmation of this view will be found in the fact that the angles of the ribs, on the side corresponding to the projection of the shoulder, project a little posteriorly, when comparison is made with those of the opposite side, *i. e.* the angles of the ribs on one side project, and on the other recede, and as this can only take place in consequence of rotation of the bodies of the vertebræ the fact is of the utmost importance. The prominence of the shoulder, *i. e.* the scapula, depends upon this posterior projection of the ribs on the corresponding side, and when the prominence of the scapula, and the angles of the ribs are considered in conjunction with the flattening or depression of the spinous processes in the dorsal region (without any lateral deviation), we may, I believe most confidently diagnose the existence of internal curvature of the spine, and the case must, without delay, be submitted to appropriate treatment.

TREATMENT OF LORDOSIS IN THE DORSAL REGION.

Lordosis in the dorsal region consecutive to caries and angular curvature in the lower cervical, or in the lower dorsal and upper lumbar regions, does not require any special treatment. It is essentially a natural effort to restore the equilibrium of the body disturbed by the angular curvature, but if the destructive disease of the spine be treated during its progress, upon the principle of mechanical support previously described, I believe both the angular and the consecutive lordosis-curvature will be much less than if no mechanical support had been applied. Do not imagine that the object of mechanical support is in any degree to straighten or diminish by pressure the angular projection when formed, but my opinion is, that when the spine is properly supported during the progress of destructive disease, the resulting angular curvature will not take place to a greater extent than absolutely necessary for curative purposes, *i.e.* bony anchylosis, and therefore the consecutive curve will be proportionably small; whereas, without mechanical support, the angular projection is generally very much larger than necessary for curative purposes, and the consecutive curvatures are proportionably excessive, frequently producing a very unsightly external deformity where very little need have existed.

With regard to the treatment of the other form of lordosis in the dorsal region which I described as existing in some cases of the so-called lateral curvature of the spine, this will be more fully described when the treatment of lateral curvature is considered, and here I would only observe that I believe it should consist in partial lying down, *i.e.* to the extent of four or six hours a-day, combined with the use of a spinal instrument with a steel plate, acting upon the principle of horizontal rotation which I shall hereafter describe to you. On the whole, the prospects of such a case, even when slight, are decidedly worse than in a more marked case of lateral curvature, with greater lateral deviation of the apices of the spinous processes, and prominence of the shoulder.

LORDOSIS IN THE CERVICAL REGION.

Lordosis occurs much less frequently in the cervical than in the dorsal or lumbar regions of the spine, and so far as I have observed, is nearly always the result of caries or destructive disease of the spine, occurring in the upper cervical vertebræ, generally in children. The head is drawn backwards, and the face directed upwards; the larynx projects forwards, and it is hardly possible to feel the spinous processes of the cervical vertebræ at the back of the neck. Any attempt to alter the position of the head is accompanied with pain, as the disease is generally progressing when these cases are brought under our notice.

We may sometimes see lordosis in the cervical region as a persistent condition after the destructive disease has subsided,

but then the position of the head is more natural than above described; the frequency, however, with which caries in the upper cervical region terminates fatally, necessarily makes these cases very rare.

In only one instance have I seen lordosis in the cervical region of congenital origin, and this case is now under my care. In July, 1859, I was requested by Sir B. Brodie to see with him a child, aged six months, which had been born in Florence, and exhibited an unusual combination of deformities, viz. talipes varus of both feet; imperfect flexibility of both knee-joints with lateral distortion, so that the legs were in the position of a severe case of knock-knees with the legs extended; probable absence of both patellæ, with some malformation of the condyles of the femur; very limited flexibility of both hip-joints, with tension of the adductor muscles, but so far as we could ascertain, without any dislocation or malformation at these joints; both hands contracted in form of club-hand; imperfect power of extension of both forearms, probably with some malformation of the condyles of the humerus, and with dislocation backwards of the radius; no muscular tension about the elbow-joints; contraction backwards of the head, with tension of the trapezius muscles, which when any attempt was made to draw the head forwards, became so prominent, that a deep central depression existed between them; the face was directed upwards, and the neck projected forwards. The spinous processes of the cervical vertebræ could not be felt. The child could suck, but was only able to draw a very small quantity of milk at a time. This child was said to have been nearly asphyxiated at the time of birth, but was resuscitated by a brandy-bath. The legs were said to have been stiff and flexed upon the abdomen. The presentation was said to be natural. The child is of full proportions, rather above the ordinary size, and there are no indications of any cerebral defect or of any muscular paralysis, or deficiency. The mother of the child, an English lady, above the ordinary stature, and well proportioned, met with a severe accident when four months advanced in pregnancy; she fell from some library steps, sideways across the back of a chair which caught her in the loins, in consequence of which, she was laid up for a month.

In this case the lordosis is evidently dependent upon muscular contraction, and the propriety of dividing the trapezius muscles must be considered, unless they yield to other means.

At present I have been content, as far as the neck is concerned, with directing the child to be nursed with the head hanging forwards as much as possible, but when this position is continued beyond a very short time, the child cries, as if in pain. When the feet and other deformities have been cured, or relieved as far as the case will admit, perhaps more may be done for the neck.

The lordosis in the neck either co-existing with, or consecutive to, caries of the cervical vertebræ, does not admit of the application of mechanical support so easily as when situated in the dorsal or lumbar regions, but I have seen my friend Mr. Hoffman, of Margate, who follows out the principle of mechanical support during the active progress of disease of the spine more thoroughly than any other Surgeon, so far as I know, very ingeniously contrive thick gutta-percha splint-like supports passing upwards from the shoulders, along the neck, to the occiput, so that the weight of the head would be to some extent removed from the neck, and transferred through the large and strong splint directly to the shoulders, and all motion of the neck prevented. I saw one case which Mr. Hoffman had most successfully treated in this way.

POSTERIOR CURVATURE OF THE SPINE.

Cyphosis, κύφωσις, from κυφόω, to bend or crook forwards.—Curvature of the spine in a posterior direction with the convexity projecting backwards, occurs chiefly in the dorsal region, as an increase of the natural curvature from several causes, and is most frequently produced by muscular debility, or the long continuance of a stooping position as in certain occupations, etc., hence this form of spinal curvature most frequently occurs in children and old people, but it may be produced by other causes at different periods of life.

In the cases which I propose to describe under the term of *posterior curvature* of the spine, it is not my intention to include that form of posterior projection of the spinous processes which frequently assumes a more or less angular form, and in all surgical works is described as *angular curvature* of the spine, and which we know depends upon caries or destructive disease of the bodies of the vertebræ,—*Pott's disease of the spine*, as it is also frequently called, because this celebrated Surgeon especially described the pathology of this affection, and separated it from the other forms of spinal curvature with which it had been confounded by the earlier Surgical writers. *Angular curvature* may perhaps form the subject of a separate lecture, but we will now proceed to consider the different forms of *posterior curvature* which best admit of classification according to the different periods of life at which they occur.

1st.—*In Infancy* posterior curvature of the spine is the constant result of general debility, and weakly infants unable to sit up in the nurse's lap long after the period at which children generally hold themselves somewhat erect in the sitting position, are frequently brought to us. Sometimes such children do not appear to be imperfectly nourished—they may even be fat, and look well—but there is a general want of muscular power difficult to explain. At this early period of life the spine has not, as yet, assumed its natural antero-posterior curvatures in the dorsal and lumbar regions and is naturally straight. Muscular and ligamentous debility will therefore easily cause the spine to assume the form of a large posterior curvature when the sitting position is attempted, and if such a child were habitually nursed in the sitting position, and especially by a nurse who always carries the child on the same arm, a permanent deviation of the spine in the posterior direction would result, generally combined with some degree of lateral curvature.

Treatment.—Such cases are best treated by a combination of local support to the spine and constitutional treatment. For local support I employ a very thick kind of leather, prepared in a peculiar way known to some instrument-makers, which when moist may be moulded to the form of the back whilst the child is lying down on its stomach—or a plaster cast may be taken of the child's back in the same position, and the leather moulded on the cast. This kind of leather becomes very hard and unyielding when dry, and then softly padded is retained in its position by elastic material passing across the chest and abdomen. Gutta-percha, perforated by small holes to prevent heat, may also be employed, but is not so good as the leather. I also direct the child to be nursed as much as possible in the reclining position.

Constitutionally I prescribe cod-liver oil with small doses of steel, but it is most essential to see that the child has a sufficient supply of good milk.

2nd.—*In Early Childhood, i. e.* from two to three or four years of age, posterior curvature of the spine is also frequently seen dependent upon muscular and ligamentous debility, in most cases probably only a continuance of the condition above described; but at this period cases not uncommonly present themselves in which a suspicion of caries or destructive disease of the spine exists, and the diagnosis may be difficult and uncertain. Such cases I have repeatedly seen terminate in angular curvature, when opinions against the probability of the existence of disease had been strongly expressed, so that a cautious opinion should generally be given, and the cases carefully watched.

Another form of posterior curvature sometimes shows itself about this period of life which may be called *hereditary humpback*, of which these two casts taken from two children, boys, in the same family, afford good illustrations. The younger child was only two years of age when brought to me, and the posterior curvature in the upper dorsal region as exhibited in the cast was then confirmed, and evidently of a permanent character. The elder boy was five years of age when I first saw him, in April, 1852, and the cast exhibits the severe amount of posterior curvature which existed at that time. This child had been condemned to constant lying down, which it was found impossible to carry out, and therefore, nothing had been done. His legs and arms are straight, and therefore there is no evidence of a rachitic condition, unless the curvature of the spine be regarded as such. The father is a short, dwarfish little man, with an extreme degree of humpback. He walks tolerably erect, but his head appears to sink in between his shoulders, and his chest is much deformed. The spinal curvature in his case began in childhood, and was not the result of caries of the vertebræ. Before this gentleman was married, three Medical men were consulted as to the probability of his deformity being hereditary, and a very

positive opinion against such a probability was expressed. However, the eldest son from whom the larger cast was taken has proved to be the model of his father. The three next children are up to the present time free from any deformity, but the younger child, from whom the smaller cast was taken, exhibited the spinal curvature even at an earlier date than his elder brother. This child was placed on a donkey's back every day, in a kind of chair, and kept in the air as much as possible, but I need hardly say that the sitting position adopted was that most favourable to the increase of the spinal curvature.

Neither of these children exhibit any of the ordinary indications of rickets, and essentially they appear to be strong, hearty children. The mother is a tall, well-formed, and robust woman. The hereditary character of this form of curvature is sadly illustrated in this gentleman's family.

Treatment.—The general principles of treatment are the same as in the first class—viz., local support to the spine, with constitutional treatment, and the reclining position as far as may be practicable. In the case of the elder child with the humpback I employed a steel instrument, and maintained constantly a slight posterior pressure with great advantage. This child has been more than nine years under my observation, and most decidedly the spinal curvature has not increased in proportion to his growth, so that proportionably to his size, he is now very much less deformed than when I first saw him, previous to which the increase had been rapid.

The leather spinal supports which I employ at this period of life may be rendered more efficient by the addition of steel crutches attached to the leather; a form of apparatus which I always employ also in cases of caries of the spine with angular curvature in children, and is made for me by Mr. Blaise, of the firm Whicker and Blaise, late Savigny, in St. James's-street, where all my orthopædic instruments are now made.

3rd. *In Youth.*—Posterior curvature of the spine more frequently occurs in boys than in girls, and presents itself in the form commonly described as "*round shoulders.*" Some boys have naturally a thick, clumsy, awkward figure, with high shoulders, and soon acquire a habit of stooping, which, if not checked before eighteen years of age, settles into a permanent cyphosis or exaggerated posterior curvature in the dorsal region. This may sometimes be hereditary, but is more frequently only an acquired bad habit, and often coexists with an indolent and sluggish disposition.

Treatment.—These cases are best treated by the drill master and active gymnastic exercises, which are decidedly preferable to any mechanical support; but in girls especially a well-contrived leather backboard is often useful, and sometimes I have been obliged to use a steel spring backboard of the T shape, or some such mechanical contrivance.

4th. *In the Middle Period of Life.*—Cyphosis, or an increase of the posterior curvature of the spine in the dorsal region, is not uncommon in the middle period of life, and may arise from various causes. Sometimes we see it as the result of chronic chest affection, in individuals who have for several years suffered from bronchitis or some pulmonary complaint. A severe form of cyphosis in the adult is not uncommonly the result of chronic rheumatism, the individual having a confirmed stoop and presenting the appearance of premature old age. In a few instances which have fallen under my observation the termination of the case has proved the cyphosis to have depended upon caries or destructive disease of the spine when there were no symptoms by which the invasion of such a formidable affection could have been diagnosed. In one instance of this kind the true nature of the affection was not suspected till after the formation of psoas abscess.

In other cases cyphosis may be simply a continuance of the form just described as occurring in the period of youth, but the long-continued position from certain occupations is an obvious cause in many cases.

Treatment.—As a general rule, posterior curvature of the spine occurring about the middle period of life may be more or less relieved by the patient wearing a double-crutch spinal instrument, with a strong webbing band connecting the crutches posteriorly, so as to exert a certain amount of pressure on the projecting portion of the spine. This pressure I have sometimes increased with great advantage by the addition of a steel plate, especially in those cases in which I have suspected the existence of destructive disease; a firm, unyielding steel support evidently gives much more relief in these cases than the webbing belt.

5th. *In Old Age.*—Increase of the posterior curvature of the spine in the dorsal region, or cyphosis, in a severe and rigid form, is a very frequent concomitant of old age, and may be the result chiefly of occupation, or of debility. One of the workmen in Mr. Blaise's factory, who had been thirty years at the turning-lathe, and exhibited this form of spinal curvature in a severe degree, observed to me: "I should be a very good figure, Sir, if my head was turned round the other side,"—meaning that his back would represent a well-formed and prominent chest. I have also observed a severe form of cyphosis in very old cavalry officers who have seen a great deal of service in India, and who have attributed it to the fatigue of frequent and long marches commonly taken by the Indian army. Among the agricultural labourers of this country a severe form of cyphosis is also of common occurrence; in very old men of this class it is almost constant, and among men from fifty to sixty years of age it is also frequently witnessed, evidently as the result of their occupation at the plough and other field labour.

From these observations, then, it will appear that cases of cyphosis differ very much in their pathology, according to the different periods of life at which they occur; and therefore I think the classification I have made is best suited to these cases, which, except at the earlier periods of life, and occasionally in the adult, present very little of surgical interest or practical importance.

INTRODUCTORY CLINICAL LECTURE,

GIVEN AT

St. Mary's Hospital,

October 4, 1861.

By THOMAS K. CHAMBERS, M.D.,

Fellow and Censor of the College of Physicians, Physician to St. Mary's Hospital, Lecturer on Medicine and on Clinical Medicine at St. Mary's Medical School.

MEDICAL THEORIES FOR THE BEDSIDE.

You know the old proverb, that "A cripple on the right road beats a racer on the wrong." This is my apology for giving you an introduction to my usual course of clinical illustration. You come to these lectures to learn, not the sciences of pathology and therapeutics, not even their general application by others, but specially my application of them, as shown on my patients in the wards. It will therefore save much time if I state to you the principles on which I act, which I consider the right road along which to conduct our patients to health by applying our acquired knowledge.

The want of a guiding principle to connect the loose facts of therapeutical experience has at all times been felt. From this practical requirement have arisen the various theories dominant from time to time in the history of our art. Working men at the bedside have started them, not philosophers in their closets. The adopters of these theories have not necessarily any strong faith in their truth or universal applicability, but they weary for a link to bind together the scattered fragments of Medical knowledge, for a principle by which to codify their laws of action,

It would be a waste of time to quote the various theories founded on imperfect data which have numbered adherents in former times, and which have been given up as false and dangerous; I do not wish twice to slay the slain. I must, however, notice five principles very widely prevalent at the present day, so widely, indeed, that some would represent them as the only therapeutical theories of the nineteenth century, but which principles I hold to be essentially erroneous and blind. I refer to Allopathy, Homœopathy, Evacuation, Counter-irritation, and Stimulation.

It is true that there are, and always have been, Practitioners who declaim against theory *in toto*, not considering that to have a contempt for theories is as if we should boast of not knowing what we do when we act or what we say when we talk. To reason at all is to theorise; no one without theorising can direct a method of cure to a sick person except at hap-hazard. It is better to have a bad theory than none, but happy is the patient whose Medical man has the best. As a matter of fact, none of these declaimers ever do prescribe without theorising about either the individual sufferer or

about the class to which they refer his sickness; and when they are able to put their theory into words, you will find it takes a form which may be fairly described by one of the names I have used just now. It is worth while, therefore, to describe shortly what these principles are.

Allopathy.—This is a simple and very plausible idea. It supposes that the important point in all diseases is a motive cause affecting the body with a certain derangement, and it suggests that the best mode of combating the derangement is to give remedies whose nature is to affect the body in an opposite way. Thus a balance is struck between disease and remedy. If there be constipation, drugs are to be given which to a healthy person would cause diarrhœa; if the urine be scanty, those which normally augment it beyond the average standard; if the skin is too dry, sudorifics; if the heart beats too fast, medicines which arrest its normal motion; in short, all states of excess are to be cured by the opposite excess, the disorder is to be *neutralized* by the temporary presence of an opposite disorder. (a)

Homœopathy.—This is a reaction against the former theory. You will observe that the strong argument, and therefore the favourite argument, of its adherents, is an exhibition of the inconsistencies displayed by wise, and of the frequently bad treatment employed by foolish Allopathists. It is inferred that if Allopathy is wrong, its converse must be right. And being able to show that successful treatment *does not* consist in administering drugs whose effects are the *opposite* of those manifested in the disease, they argue therefrom that it *does* consist in administering those whose effects are the *same* as those manifested in the disease. If there is diarrhœa, colocynth is to be given; if inflammation of the bladder, a drug that inflames the bladder—cantharides. For hectic fever and emaciation, the treatment is to be mercury, arsenic, phosphoric acid, caustic potash,—whose action in measurable doses is to augment emaciation and so to cause hectic (b). To prevent evil results from carrying out this theory, the doses are to be reduced to such immeasurable smallness as not to produce any of their usual pathogenetic effects.

Evacuation.—This principle is founded on the notion that human reason can know no more of disease than as "an effort of Nature to destroy some noxious foreign matter, and to recover the patient by expelling it from his body"(c). It would make, therefore, the chief business of the Physician to consist in watching the proper moment for assisting this elimination, in setting it going, or in substituting instead of it an artificial egress for the morbific material.

The *Chemical* and *Antidotal* systems of treatment have the same pathology as the Evacuating; they look upon disease as an active foreign substance, which only requires to be rendered inert for the patient to be restored to health. A *materies morbi* is pre-supposed.

Counter-irritation.—The leading principle in the treatment of some Practitioners seems to be the substitution of an artificial disease which is easily controllable, or merely temporary, for one which is dangerous or which has a tendency to be permanent. The difference between this idea and Allopathy is, that the disease they excite is not opposed in nature to the original disease: usually, indeed, it is of the same nature, but in a different part. They intend to act on this principle when they raise a raw blistered surface on the skin to cure a raw pus-secreting bronchus; when they give purgatives to relieve a cold on the chest; when they substitute excessive diuresis for dropsical swelling. It is assumed, with some show of reason, that two morbid actions do not go on at once, or at all events not with equal intensity, or at their acme of force, in the animal body. While a patient has scarlatina, the poison of measles does not seem to affect him; the supervention of insanity renders phthisis dormant; the action of one drug excludes in a great measure the action of another, as during the diarrhœa caused by a purgative, sudorifics and diuretics are given in vain. The idea, then, of counter-irritant practice is for one disease which is dangerous or painful, or which tends to disorganize the body, to substitute another less dangerous, less painful, or whose disorganizing tendencies are but temporary.

Stimulation.—The great advances made of late years in Morbid Anatomy and Pathology, and the important position they necessarily hold in modern Medical education, have a tendency to make the student look upon them as sciences distinct from Physiology. He regards them as exhibiting a phase of nature quite different from, and opposed to, Normal Anatomy and Physiology. Disease is to him an active and intelligent foe, at war with his friend the human body, but with a code of laws of its own very necessary to be observed and calculated upon. The enemy's tactics seem so good that he is seldom to be driven back by a surprise, but the vital forces must be aided to hold out, so that he may be obliged to retire exhausted. The agencies under the command of the individual life are arrayed against the pathological forces with certain other external influences also allied to them. (d) On these grounds, it would seem the main duty of the Medical man to weaken all morbid phenomena, and to strengthen those which are normal—to take away all that feeds pathological processes, and to supply whatever nourishes those remaining healthy.

These five ideas include, I believe, all the definite aims which have been professed up to our own time in the treatment of disease. But few are rash enough to reduce *ad absurdum* their favourite law of action by applying it without compromise to every case. The Allopathist will shrink from checking a morbid process which experience shows him leads towards health; the Homœopathist will cure his patient by allopathic treatment; the Evacuator, or Humoral Pathologist, will arrest diabetes or colliquative sweating, although abnormal material is leaving the system by these outlets; the adherent of Counter-irritation finds it inapplicable to many diseases; and the staunchest lover of stimulants will gain his object by evacuants, counter-irritants, and allopathic remedies.

Many, indeed, profess openly this Eclecticism, and some are illogical enough to call it a principle of action. But it is obvious that *Eclecticism* is a mere negation, it is a protest against any of the principles as ends, and an adoption of them as means, as possible means, towards an unknown end. A negation of the same sort is *Expectant Medicine.* To some reverent and humble, but unpractical minds, Nature appears so perfect that it is presumptuous for Reason to attempt to help her. They are jealous of that

> "art which shares
> With great creating Nature,"—

forgetting that there

> "is an art
> Which does mend Nature—change it rather—but
> The art itself *is* Nature."

Expectant Medicine can only be looked upon as a protest against general error, as Homœopathy is against a particular error.

In short, all confess, either by words or deeds, that a true guiding principle—a single aim—in the treatment of disease is wanting.

Does not the daily growing hesitation of the conscientious, the louder and louder bluster of those who assert that they alone are the "orthodox," show a rapidly diminishing faith in our fathers' *principles* of Medical treatment? And does not this diminishing faith in an age of advancing knowledge show those principles to be really unsound? Since the time when they were first enunciated as guides and aims in Medical practice, science has taken strides onwards such as never have been seen before, and especially in those departments which explain to us the nature of living beings, and their relation to the material world around them. Surely it is time to expect new lights on our theory of the art of healing, as well as the theory of pathology. It is time to expect to

(a) Pithily put by Hippocrates, "ὁκόσα πλησμονὴ τίκτει νοσήματα κένωσις ἰᾶται· ὁκόσα δὲ ἀπὸ κενώσιος γίνεται νοσήματα πλησμονὴ ἰηται· . . δεῖ τὸν ἰητρον ἐναντιον ἵστασθαι τοῖσι καταστεῶσι κ. τ. λ."—Hippocrates "On Human Physiology," Kühn's edit., Vol. i. page 361; and also in his treatise on gaseous bodies as a cause of disease (περὶ φυσῶν), Vol. i. page 570, "τὰ ἐναντία τῶν ἐναντίων ἐστιν ἰήματα."

(b) The examples are taken *passim* from Yeldham's "Homœopathy in Acute Diseases," which represents the current application of the laws made by Hahnemann. An exposition of the arguments and experiments on which the Homœopathic dogmata are founded, may be found put in a very readable and elegant form in the "History and Heroes of Medicine," by Dr. Russell. The author is evidently an "almost persuaded" convert to Rational Medicine, so clearly does he expose the fallacies which deceived Hahnemann.

(c) Sydenham, Obs. Med. Cap. I., "Dictat Ratio morbum. . . . . nihil esse aliud quam Naturæ conamen, materiæ morbificæ exterminationem in ægri salutem omni ope molientis."

(d) "Krankheit ist der Kampf des egoitischen Princips (des besondern Lebens) mit dem planetarischen, der schädlichen Potenz, die es zu zerstören sucht."—Schönlein's Allgemeine Pathologie, S. I.

see a further and a brighter goal beyond those limited motives of action which eonfessedly do not satisfy us.

It is of no use to mince the matter—the root of the whole five principles is unsound; they are based on a false foundation, and all the results of increased knowledge can only show us more and more its falseness. Examine one after another, and you will see that it rests on the assumption that Disease is an entity, a motive cause, a *positive* existence. To the Humoral Pathologist it is a *materies morbi*, a poison to be evacuated. To the Allopathist and Homœopathist equally it is a *potent motive power* which it is their business to counteract, the one by means as different as possible, the other by means as like as possible. To the adherents of Counter-irritation disease presents itself in a similar, though somewhat less definite, light. With all it is something positive—a separate and peculiar manifestation of life—a property or a substance to be overcome or taken away. All that their art aims at, therefore, is "to weaken life" (e) as exhibited in the morbid phenomena. Stimulation is a step in the right direction, inasmuch as it is a protest against the foregoing practice; but it, too, fails to provide a rule for all cases, and experience shows it an unsafe guide. One reason is, that its adherents have somewhat mistaken the nature of the tools they employ, and have often misused alcohol and alcoholic drugs. But the chief error is, that it, too, mistakes a shade for a substance, and sets disease up as a positive evil power at war with life.

Now, I maintain that unprejudiced observation can show this to be an utterly false view; that it has led of old, and cannot but lead in future, to unsafe practice if followed to its logical consequences; and that all the good practice which may have sprung up at various times, has arisen in opposition to it. I believe that it has had upon Medicine just the effect that would be wrought upon optics by regarding a shadow as a material object instead of an absence of light; upon physics in general by accounting cold an active agent. The main hope for bringing therapeutics up to the level of modern science lies in discarding, at once and for ever, this traditional notion.

Then will be the way open for that which an advancing knowledge of disease is forcing upon us—that

DISEASE IS, in all cases, not a *positive existence*, but a *negation*; not a new *excess* of action, but a *deficiency*; not a *manifestation of life*, but PARTIAL DEATH: and, therefore, that the BUSINESS OF THE PHYSICIAN is, directly or indirectly, not *to take away* material, but to *add*; not *to diminish function*, but *to give it play*; not to *weaken life*, but TO RENEW LIFE.

These are the principles of RESTORATIVE MEDICINE, and to illustrate their universal application, I intend to devote this course of Clinical Lectures, and the bedside teaching of our wards.

ORIGINAL COMMUNICATIONS.

CLINICAL MIDWIFERY.

By ROBERT LEE, M.D., F.R.S.
Obstetric Physician to St. George's Hospital.

(Continued from page 158.)

Case 721.—At half-past two a.m. on Saturday, January 3, 1857, I received a note from Mr. Randolph in which it was stated that he had "a case of protracted labour, forty-two hours, with impaction of the head at the brim of the pelvis. Venesection employed in the afternoon with a slight improvement, but again we are in a fix, with rapid pulse, and much anxiety; be kind enough to grant me your assistance." The patient, aged 34; first labour; membranes ruptured at the commencement; towards Thursday night pains active. Mr. Randolph had left her at 11 p.m. and was called at five on Friday morning. The dilatation then not very considerable; os uteri rigid, with a full, bounding pulse. Friday, 3 p.m.—No progress; symptoms urgent; venesection ad. ʒxv. After that Mr. Randolph left her. At 7 p.m. she was seen again; the os uteri more dilated, but no advance of the head. At 9 p.m.—Found the head had partially passed through the brim, giving hopes that the labour would go on favourably, pains being active. A pint of urine drawn off, and some castor-oil given in the afternoon, but it had not operated; since twelve, pains have been almost completely arrested. No progress. 3 a.m. Saturday—Expression of countenance good; no delirium; tongue very furred; pulse 130; os uteri not fully dilated, felt surrounding the whole head; head has not passed through the brim of the pelvis, the greater part above the brim; the pains are now feeble and produce no effect upon the head. Nature will never complete the delivery; immediate delivery necessary; the perforator and crotchet the only means by which the life of the patient can be preserved. Great force required to extract the head; the bones were torn to pieces; the craniotomy forceps gave no help. At last the crotchet was passed into one of the orbits, and after two hours' hard exertion succeeded. It was very difficult to extract the shoulders, a tape round the neck was not sufficient. The crotchet was passed up into one of the axillæ, and it required force with these. The placenta did not come away in the usual time. Great hæmorrhage took place. I passed the hand into the uterus and found the placenta adhering, which was detached and removed. At last the hæmorrhage ceased. I reached home at seven. In extracting the placenta the promontory of the sacrum was found projecting unusually forward, but not very greatly. In this case there had also been great rigidity of the external parts. The patient recovered most favourably. In September, 1860, this patient was again five and a-half months pregnant, and the question of inducing premature labour required serious consideration. It was a small, not a distorted pelvis, we thought. The patient went the full time, and the child being small passed alone without help.

Case 722.—On January 12, 1857, at half-past twelve, I was requested to see a case of protracted labour, "which may probably," it was said, "require instrumental aid to relieve the patient, who is thirty-six years of age. First child, we may call it." I thought it probable that the child would be expelled alive without assistance, and this took place late in the afternoon, but the placenta was retained during an hour and a-half, and much hæmorrhage occurred and several attempts had been made to extract the placenta, by which it was much torn. I found the whole in a broken-up state within the uterus, a part adhering firmly. I removed this in the usual manner; the hæmorrhage ceased after the complete extraction of the placenta, and the patient recovered favourably.

Case 723.—At 8 a.m. on Wednesday, January 21, 1857, I received a note from an experienced Practitioner. "I have been," he said, "at the house of the bearer, Mr. ——, all night. His wife has no perineum; that was lacerated in her first labour. The child's head is low down and impacted, but I am anxious you should see her as soon as you can." I was informed that Mrs. —— had been delivered by Mr. —— with the forceps, and when the labour had lasted only six hours. The perineum was extensively lacerated. The second labour had commenced at eight o'clock the previous night. The first stage was nearly completed. The head of the child is now near the outlet; it presses against the thickened band formed by the lacerated perineum, and this has prevented its escaping for some six or more hours. The pains were strong. The ear towards the right side of the pelvis could be felt, but I thought the blades of the forceps could not be applied without tearing the hard edge of the torn perineum, and the rectum would thereby have been laid open. There were no symptoms to require immediate delivery. She was not exhausted, and I thought it probable that the head, if time were allowed, would pass safely; but resolved, if it did not, to lessen the head and extract it rather than run the risk of inflicting further injury upon the parts by the use of the forceps. At 2 p.m. no progress had been made, though the pains had been strong and regular since 8 a.m. There being then no hope that the head would ever be expelled by the natural efforts, after the most serious consideration, we thought it most advisable to lessen and very cautiously extract the head and, if possible, avoid lacerating the parts, and laying open the rectum. This was done, and no mischief produced. I afterwards ascertained that the laceration of the perineum had not been discovered for several months after the first labour had been completed with the forceps.

Case 724.—On February 5, 1857, I attended a lady in labour who was in the last stage of consumption. The labour

(e) "All that art can do is to weaken life." Van Swieten's "Commentary on Boerhaave," Vol. I. § 106.

had commenced early on the morning of the 4th, with the escape of the liquor amnii. The pains continued feeble during the whole day, when there was a prospect that the head would be expelled by the natural efforts. On the morning of the 5th she became very feverish, with rapid, feeble pulse, and laborious respiration. At 5 p.m. I requested a consultation with Dr. Henry Davies, who was of opinion that she might still be left for a time to the natural efforts. He recommended ergot to be given, and 3ij. of the infusion was given every quarter of an hour. No effect. At 9 p.m. we determined to deliver. I dilated the os uteri gently, and the head passed through it, and appeared from the pains which followed that the head would probably pass through the external parts without assistance. Brandy and water were given. A violent rigor took place, and complete cessation of pain. A hand was then felt for the first time along with the head. The anus protruded. To preserve the patient from dying undelivered, we were compelled immediately to lessen and extract the head, which it would have been better if we had done much earlier, and not given the ergot of rye. However, the placenta came away without hæmorrhage, and she rallied sufficiently to take leave of her husband and children. It would have been sounder practice, I have since thought, to have induced premature labour in this patient; but the subject, after being maturely weighed in consultation, was not considered advisable.

Case 725.—At 3 a.m. on April 9, 1857, I was called to see Mrs. ——, who had been in labour the whole of the preceding day. The head of the child was firmly wedged in the brim of the pelvis, all the soft parts much swollen. An ear could not be felt. The labour pains were nearly gone. Mr. ——, who was in attendance, said he thought the forceps should be employed. I inquired if he felt one of the ears of the child? He answered very decidedly "Yes." I said, "Where do you feel it?" and begged him again to examine. He did so, and then allowed that an ear could not be felt. I inquired if he had ever seen a similar case in which the forceps was applied? He said "Yes. That Dr. —— had done so, and that he was afterwards compelled to perforate the head, and that sloughing and perforation of the bladder followed." I opened and extracted the head without delay, being satisfied that this was the proper course to pursue. But the labour had been allowed to continue too long, and extensive sloughing of the vagina and bladder followed; and I saw this patient afterwards in a wretched condition. I had seen this patient in her first labour, in King-street, Golden-square, a considerable number of years before. I then ascertained that the pelvis was somewhat distorted. The child passed through the brim with great difficulty alive, and died when 2 years old. The second child was born alive, and is alive and is 7 years old. The last, the third labour, Dr. —— was called to see the patient after she had been upwards of forty-eight hours in labour. The head was opened, and the patient, I was informed, suffered dreadfully.

Case 726.—On the evening of April 19, 1857, with Dr. Blakeley Brown, I saw a lady who had been many hours in her first labour, the head of the child had not advanced since nine o'clock in the morning. The patient was excessively stout and highly nervous and excitable. The labour pains had nearly gone off, and she was greatly exhausted. An ear of the child could not be felt. The catheter had been required. It was obvious that nothing but mischief could result from leaving the labour to go on. We were of one mind. Dr. B. Brown opened and extracted the head without much difficulty. The funis was round the neck. The placenta soon came. The patient, I believe, recovered in the most favourable manner.

Case 727.—On May 11, 1857, Dr. Van Oven requested me to see a lady somewhat advanced in life, who had been upwards of forty hours in labour with her first child. The os uteri was not completely dilated, and the vagina and all the soft parts, even the external parts, were greatly swollen. We were both satisfied that the labour would never be completed by the natural efforts, and that immediate delivery was necessary, and that the only safe method of accomplishing the delivery was to open and extract the head. This was done with great care, to avoid contusion of the soft parts, and the patient recovered favourably. There was no distortion of the pelvis in this case, the difficulty arose from the rigid undilatable state of the os uteri and all the soft parts at the outlet. In her second labour, no difficulty.

Case 728.—Difficult labour from extensive cicatrices in the vagina. June 25, 1857, British Lying-in Hospital. 1 p.m. At 12 o'clock I received the following note from the matron, "The patient is come into the Hospital upon whom you performed premature labour two years ago. She is now very bad. I should very much like you to see her soon. Her pains are very bad. It is the patient with the rigid vagina." The pains commenced at 7 a.m., the membranes were ruptured; the head of the child was prevented from escaping by a cicatrix like a firm, cartilaginous band, chiefly behind, near the outlet of the vagina, and on the right side. It was so hard that there appeared no probability of the head ever escaping. I made as deep an incision behind as I durst venture to make, and another on the right side. I did this, and then it was found that the cicatrix was very extensive, that the posterior wall of the vagina was so much thickened and indurated that there appeared no hope of the child ever passing, and great danger to the patient if not delivered. I resolved immediately to relieve her and lessened and extracted the head, and this required great force and patience. The contracted part reluctantly yielded and I had a suspicion that a part was lacerated. The placenta soon followed, and the patient had a perfect recovery, which I hardly expected.

Case 729.—On Saturday, July 4, 1857, I was called to see, in consultation, a lady at some distance from London, who had been forty hours in labour with her first child. The external parts and vagina were enormously swollen. The os uteri was imperfectly dilated, and the head had not passed completely into the cavity of the pelvis. The idea of delivering with the forceps could not for a moment be entertained. Immediate delivery was required, but the great rapidity of the pulse, delirium and swollen state of the parts led me to believe that she would not recover if delivered by lessening and extracting the head. Slight ulceration took place around the meatus urinarius, but no sloughing of the vagina. A week after delivery she appeared to be in the utmost danger, but the tenderness of the abdomen, the rapidity of the pulse, and disturbed state of the brain, gradually subsided, and she got quite well, and has since been happily confined without any difficulty.

Case 730.—A few days later I saw a case very similar, in Dover-street, when to save the patient's life it was necessary to deliver by the same means. An attempt to apply the forceps had been unsuccessfully made. It was the first child, and the patient had been in labour thirty hours. The pains had entirely ceased, and symptoms of dangerous exhaustion had suddenly supervened. The recovery was much more favourable than in the last case.

(To be continued.

A FOREIGN BODY DEEPLY IMBEDDED IN THE ORBIT FOR A PERIOD OF SIX WEEKS.—REMOVAL AND RECOVERY.

By J. C. WORDSWORTH, F.R.C.S.
Assistant-Surgeon to the Royal London Ophthalmic Hospital.

J. K., aged 17, applied to me on February 23 on account of an abscess in the right orbit. He stated that about six weeks before, he had received a blow on the eye with a tobacco-pipe, in a dispute with another boy. He at once felt considerable pain, and blood flowed freely from a wound in his upper eyelid. He was taken to a Hospital, where he was received as an in-patient, and remained about five weeks. An abscess formed in the orbit, and was opened, but after some time closed, and again suppurated several times. He suffered considerable pain during the formation of these abscesses, but the function of the eye was not otherwise much disturbed.

When he came under my care, another collection of pus had occurred immediately below the globe, and was "pointing" into the inferior palpebral sinus. This was of course immediately opened, with a considerable escape of pus.

From the history of the case, I was led to believe that there must be some foreign body to account for the repeated abscesses, and therefore made a careful exploration of the orbit by means of a probe, and discovered a piece of tobacco-pipe $1\frac{5}{8}$ inches long, lying along the floor of the orbit,

in the direction of its axis. It was easily removed, and a rapid recovery ensued.

I will only add a few words of comment on the case. In the first place I may observe, that it forcibly indicates the importance of a careful examination of wounds of the cavities of the body, especially for ascertaining the presence or absence of foreign bodies; and particularly so when the cause of the wound is such as may so easily be supposed to produce this complication. In this case the pipe was thrust through the upper lid, and striking on the floor of the orbit, broke, and changing its direction, passed into the space between the globe and the floor of the cavity. Its point of entrance, therefore, could be discovered only by a careful scrutiny of the palpebral sinus. In the second place, I may note, in passing, how small was the injury produced by so considerable a body in the orbital cavity for so long a period. And, lastly, I may appeal to this case for an illustration of the importance of making a careful examination for foreign bodies in cases of repeatedly recurring abscesses after wounds. The neglect of this precaution has robbed many a Surgeon of his fair fame, and exposed him to the ungenerous criticism of a more wary, if not a more skilful rival. Trite though the axiom may be, it is remarkable how often its importance is forgotten or neglected; so much so, that probably few Surgeons have passed through life exempt from the reproach of its dereliction. We may trace almost all our mortifications from errors of diagnosis or of treatment (and he is a very fortunate, or a very callous mortal that has none), to either rashness or the abnegation of well-founded maxims.

50, Queen Anne-street.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

Assistant-Physician to the Metropolitan Free Hospital.

A SURGICAL REPORT OF THE

CASES ADMITTED INTO

UNIVERSITY COLLEGE HOSPITAL,

FROM THE LATE ACCIDENT ON THE

NORTH LONDON RAILWAY.

By Mr. GANNON, House-Surgeon.

Patients under the care of Mr. MARSHALL, acting for Mr. QUAIN.

(Continued from page 405.)

ADDITIONAL PARTICULARS TO CASES 10 AND 11.

Case 10, *continued* (a).—September 24.—Pulse 144; tongue dry, dirty brown; is unable to articulate distinctly. Margins of scalp wound healthy, but exposed bone is very white and dry. Complains of occasional headache; both pupils dilated, right more than left; tongue being protruded, does not deviate from middle line. No facial paralysis. 6 p.m.—Pulse 146; the loss of speech now almost complete; this, together with the peculiar expression of the patient, combined with headache and recent rigors, lead Mr. Marshall to suppose there was some suppuration going on beneath the exposed bone. He therefore, with a small trephine, removed a small portion of bone, about the size of a fourpenny-piece. Great caution was necessary on account of the close proximity of the piece removed to the longitudinal sinus. When the fragment of bone was away, some pus (about twenty drops) oozed up from the posterior margin of the opening; the bone around bled freely; the dura mater looked rather dark and sloughy. A piece of oiled lint was passed into the opening and warm water dressing applied over the whole. Patient rallied a little after the operation, and seemed more conscious. About three hours afterwards, wound being examined, a small quantity of pus was found to have exuded; pulse 160, very weak; temperature in axilla 105¼; breathing is quite quiet; is able to swallow without difficulty. 25th.—Pulse 144, weak, compressible; respiration 36, rather laboured; temperature in axilla 102½; can answer questions, though feebly; tongue dry; no deviation; no difference in muscular movements of either side of face and mouth; pupils act, are equal and rather dilated; right arm and leg paralysed as to motion, but sensation remains,—this came on suddenly; a good deal of pus discharged from wound; dura mater looks less sloughy. 26th, 10 a.m.—Pulse 142, feeble; puts out tongue when told to do so; skin moist, but hot; wound about the same as yesterday; no bulging up of dura mater as if there were matter beneath. 4 p.m.—Pulse 144, weak and irregular; dura mater is of an ash-grey colour, a probe passed in at posterior part of wound shows it to be detached from bone for about half an inch in a direction backwards and to the left. Ordered the following:—℞ Hyd. chlor. gr. ½, pulv. ant. pot. tart. gr. ⅛, sacch. alb. gr. iij. Ft. pulv. 6tis hôris. 27th.—Pulse 134, feeble, very irregular; respiration 40, more laboured; temperature in axilla 102; loud sonorous rhonchi heard all over the chest anteriorly; heart sounds quite inaudible; articulates feebly; less quantity of pus discharged from wound; the dura mater soft and shreddy; no puffiness of scalp or any part of head. 28th.—Patient unable to expectorate; bronchitis increased; pulse not to be counted; very weak; gradually sank at 1 a.m. *Post-mortem, Thirteen Hours after Death.*—Brain: On removing skull-cap, pus was found on membranes on the right side, close to the trephined spot; when the membranes were removed, a small amount of pus was found on surface of left hemisphere, almost opposite to the trephined spot on the right side; in the longitudinal sinus and veins entering it, pus was also found in a clotted mass, resembling a fibrinous clot; purulent matter in the longitudinal fissure. The rest of the brain and brain-substance showed no abnormal signs. The rest of the organs were healthy, except left lung, which contained several small collections of pus, greater number being in inferior lobe. Rupture of the diaphragm: On removing sternum, stomach was found to lie in the thorax on left side, between lung and heart, but partially covering latter; about three inches of the duodenum, with some omentum, together with the spleen, were also lodged in the thorax; the opening was in the tendinous part of the diaphragm (about two inches to left of œsophageal opening), irregularly oval in shape, the margin thin and sharp; the spleen was attached by a few adhesions, recent in character, to the left of the opening and the upper surface of it. It seems most probable that the rupture of the diaphragm occurred at the time of the accident, and the abnormal position of the stomach accounts for several of the symptoms, as the incessant vomiting, pain at the epigastrium, etc.

Case 11, *continued* (b).—September 23.—Complains of pain in lumbar region. Ordered to be dry cupped on either side of spine in that region, and to take the following mixture:—℞ Ol. terebinth ♏xv., ol. menthæ ♏j., syrupi ʒij., mucilaginis ad ʒj. Ft. haustus, ter die sumendus. Urine alkaline; contains a quantity of mucus; bladder injected with the acid and opium. 25th.—Pain in loins continues. Ordered to repeat dry cupping. 28th.—Pulse 92; skin cool; sweating not so frequent; has only one attack during the twenty-four hours, and this he states comes on between one and two o'clock every morning; tongue moist; appetite not so good as it has been. Respirations 28, deep, thoracic; cough not quite so troublesome; expectoration pretty copious; consists of frothy mucus; pain in left side of thorax diminished; says his chest is getting better. Pain in loins (since cupping on Wednesday) up to yesterday was much better; it has, however, returned since then. *Paralysis.*—Motor power of legs greatly restored; can move them in any direction in bed; but the right leg is the best; still no power in extensors of ankles; extensors of toes act but very slightly. The peronei longi and tibiales antici, are the only muscles of leg which act well. Muscles of thigh act well; these were paralysed at first, but power now is regained. Sensory power not so much improved; can tell when the toes of *left foot* are touched; can also tell when great toe of *right foot* is touched; can feel the others, but cannot distinguish between them. *Bladder.*—Has no more power over it; urine does not dribble quite so much (says the dribbling sometimes comes on directly after it has been drawn off); urine still

(a) See page 349.

(b) See page 376.

drawn off; motions pass involuntarily. The bed-sore on right nates is about the size of the palm of one's hand, one and a-half inch deep; only a portion of the slough has separated; does not appear to be spreading; is dressed with iodine paste, and over this soap plaster spread on leather. There is also a small sore forming on left nates. Ordered to omit other medicine, and to take ℞ Mist. quinæ ℥j. ter die. October 2.—Still pain in loins; urine drawn off twice and sometimes three times in the twenty-four hours; its reaction has varied from acid to slightly alkaline; dribbles very little; bladder washed out with warm water every day; slept well; appetite pretty good. 3rd.—Pulse 104; respiration 26. Soon after dinner yesterday patient was seized with retching and vomiting, for these he was ordered Mist. effervescens; but it continued up to 5·30 this morning. After the vomiting had ceased, intense dyspnœa came on; patient almost suffocated. Loud sonorous rhonchus on both sides of chest; expectoration glairy frothy mucus. The plaster round thorax was removed, and a mustard poultice applied to front of chest, which afforded great relief in about an hour. Ordered, ℞ Ammon. carb. gr. v., dec. senegæ ℥j. Ft. haust. 3tiis hôris. 2 p.m.—Pulse 104; feeble; respiration hurried; skin cool; tongue dry and loaded; bowels open pretty freely; motions natural in appearance. 4 p.m.—Was seized with a slight shivering fit, followed by vomiting. Ordered, ℞ Pulv. opii. gr. j., Ft. pil. statim. He vomited shortly after taking the pill, and continued to do so till 7 p.m., when creasote gtt. ij. were given with great relief; urine drawn off, alkaline, and contains a small amount of mucus. 4th.—Has had frequent attacks of vomiting, followed by heat of skin and profuse perspirations during night. Creasote was repeated at 4 a.m., which stopped sickness for a while, but now, 10 a.m., it has commenced again. The vomited matter consists of a brownish, glairy fluid, acid in reaction; breathing hurried; slept at intervals during latter part of night; says he is in no pain, except when vomiting comes on, and then feels it in chest; tongue moist but coated; pulse 104. 5th.—The sickness ceased yesterday evening; he slept the greater part of the night, but towards morning sickness returned again. Pulse 104; breathing hurried; tongue dry, and brown in middle; skin moist. Examined by Dr. Walshe.—Nothing notable over whole anterior chest; patient was then rolled over on left side and chest examined posteriorly. Extreme dullness of right base, due chiefly to solidification of lung, and probably to some pleuritic effusion; dullness left base, but not to such an extent. Ordered ℞ Ammon. sesquicarb. gr. xv.; aquæ ℥j. Ft. haust. tertiis hôris cum acid. citric. gr. xv.; also, ℞ Empl. lyttæ. 4 × 4 epigast. 6th.—Pulse scarcely to be counted, about 142; respirations 44; breathing short, difficult, spasmodic; has slept a little during the night; sickness better, occurs at longer intervals; urine and fæces are still passed involuntarily; bed-sores looking very dry; is conscious, but has some difficulty in speaking; suffers no pain; urine drawn off—very alkaline and ammoniacal. 7th.—Patient became worse during the night; breathing very noisy and difficult; this, however, became easier towards 5 a.m., but at 7 a.m. patient died, having remained conscious to the last. *Post-mortem Thirty-three Hours after Death.*—Head: Membranes and brain itself perfectly natural. Thorax: No fluid in either pleura — extensive recent adhesions, right lung especially; no fluid in pericardium. Heart: Right side full size; valves normal; left side, valves not thickened, neither the aortic nor auriculo-ventricular. Lungs (right): Anterior part gray and healthy; crepitates freely under fingers; back part of both lungs largely congested, but no consolidation; when vessels are laid open fluid blood is found in more remote: no clot; bronchial tubes reddened and loaded with dark mucus; congested part of lungs float in water. The sternum was broken between the first and second divisions, and now there is a large quantity of callus around seat of fracture; no other fracture is now apparent. Ribs: Third, fourth, and ninth broken posteriorly; fifth and sixth anteriorly on left side. Abdomen (stomach): The whole of the mucous membrane is congested, but especially towards the cardiac extremity and fundus, and in this situation there are patches of minute ecchymosis. Kidneys: Both present exteriorly a dark gray colour. Right: capsule thickened; does not tear off so easily as it should do; on section the general surface is dark gray; the medullary cones are intensely congested; the pelvis has an ash-gray colour, and is minutely injected; substance rather tougher than normal. Left: Capsule tears off more easily than right; on section it presents nearly the same appearance as right, but the colour is not so dark, nor is it so intensely congested. Bladder: Mucous membrane tears off very easily; the whole of it slightly congested, but especially at fundus and around ureters, and in this situation there are minute ecchymosed points; it does not appear thicker than natural. Ureters: Right rather dilated as compared with left: mucous membrane congested and of same colour as kidneys; right more congested than left. Spleen: Large and very soft, but does not appear to have been injured. Liver: Presents exteriorly a dark gray colour, which is also seen on section, otherwise it seems healthy. Intestines natural. Spine: There is fracture through the body (with a dislocation backwards) of the twelfth dorsal vertebra; no depression of spinous processes at any point. Condition of the Cord: The cord is uninjured, but congested for two or three inches above cauda equina. The membranes in some parts are thickened, especially dura mater. Anterior surface of dura mater firmly adherent to periosteum (which has been separated from the bones at this part in removing cord from spinal canal). On opposite side of this portion of periosteum, about opposite seat of fracture, it is much thickened, apparently with a deposit of lymph partially organised.

GUY'S HOSPITAL.

CASE OF OVARIOTOMY—DEATH—AUTOPSY.

(Under the care of Dr. J. BRAXTON HICKS and Mr. COOPER FORSTER.)

E. B., aged 20, married one and a-half years. She first noticed the disease two months after marriage. She had been admitted into Mary Ward under Dr. J. Braxton Hicks in August, 1860. Twelve quarts of fluid were then evacuated by tapping. A small secondary cyst was at that time noticeable in the anterior part of the right side of the cyst-wall. In November of the same year she was again admitted, tapped, and the cyst injected with a watery solution of iodine. Much irritation was caused by the operation, but she went out in about a month. The secondary cysts were found, on this second tapping, much increased in size, number, and solidity. She was a third time admitted in May, 1861. The secondary growths had formed a hard mass, which had enormously increased at the expense of the primary, and when tapped, only yielded a few pints of pale, flaky fluid. The rest of the cysts were small, and it was found of no use to puncture them. She went out in a fortnight, but her health beginning to fail, and the last tapping having failed to give much relief, the only chance for cure which remained was excision. It was proposed, with a clear representation of the risks, and accepted. She had become decidedly thinner since her first admission.

Chloroform having been administered, the operation was performed on Tuesday, July 9, 1861. Owing to the warmth of the weather no necessity existed for any precautions concerning temperature, except to obtain fresh air. A good-sized room in the centre of the Hospital was chosen, and especial care that neither operator nor assistant had anything to do with the post-mortem room. This remark is necessitated, as it has been suggested that the first fatal case occurring under Mr. Forster's care was owing to his having been in the dissecting-room in the morning, and operating in the afternoon, which is not correct. The small incision was made, extending from about an inch below the umbilicus to an inch above the pubes. It might have extended four inches altogether. A remarkably thin cyst was observed, which was tapped. Several secondary cysts appeared, and on attempting to withdraw them from the abdomen, they tore easily, and discharged their contents into the peritoneum. They appeared composed of the thinnest membrane, and broke down on the slightest touch. The greater part of the cysts were non-adherent to the parietes of the abdomen, but some were attached, and a considerable surface of omentum was adherent firmly to them. This was separated carefully, a very small pedicle appeared on the left side, which was attempted to be secured by a wire suture, twisted with a pair of Carpenter's nippers. This not being considered by Mr. Forster sufficiently secure, the pedicle was tied with a ligature; the contents of the cysts,

with blood which had passed into the peritoneum, were then carefully removed, and as considerable oozing was still taking place from the omentum, it was tied. The ligatures around the omentum and pedicle were returned into the abdomen, and the incision in the parietes brought together by pins. She never rallied, and died in twenty-seven hours.

Post-mortem.—Slight general peritonitis of a low form; coils of intestine united, and in pelvis one pint of pink-coloured, turbid fluid, but no coagulum; ligature around omentum; operation perfect; uterus healthy and free, with its right ovary and tube; around the left was the ligature; anterior walls of abdomen were covered in places with shreds of tissue, from the tearing away of the cyst.

METROPOLITAN FREE HOSPITAL.

OVARIAN DROPSY—OVARIOTOMY—RECOVERY.

(Under the care of Mr. CHILDS.)

[Reported by Dr. JOHN WARNER, House-Surgeon.]

Ellen D., aged 50, a well-nourished, and otherwise healthy Irishwoman, was admitted into the Metropolitan Free Hospital on August 28, 1861, under the care of Mr. Borlase Childs, for ovarian dropsy. The abdomen was greatly distended, universally dull on percussion—except in either ilio lumbar region,—and fluctuated very distinctly, leading to the opinion that the disease was unilocular and contained a thin fluid.

She had been a widow two and a-half years, had been married twenty-three years, and had six children,—the last twelve years ago. The catamenia have been regular up to six years ago, since which they have not appeared; she has not been liable to any other discharge. She first noticed the enlargement of her abdomen about twelve months ago by finding that she was "getting clumsy" in stooping, which much interfered with her movements as charwoman. She did not notice that the enlargement began on either side, but has observed it to be increasing more rapidly of late. She had not had any abdominal pain. She had had no Medical advice until she came under the care of Mr. Childs.

Operation.—On September 23, at 2 p m., the patient being placed under chloroform in a warm room, and a catheter passed, Mr. Childs made an incision in the linea alba from below the umbilicus downwards for about four inches, cutting down to the peritoneum, which was opened on a director to the size of the external wound. Mr. Childs then passed in his hand for a short distance, and finding no adhesions, the cyst was punctured with a troear, and a somewhat viscid and opalescent fluid escaped, in quantity about twelve pints, the cyst being gradually pulled out as the fluid drained off, the sides of the incision being pressed together so that nothing was seen but the cyst during the operation. The pedicle of the tumour, which was about equal in size to two fingers, was then transfixed with a double whipcord ligature and tied. The cyst being removed, the wound in the abdominal parietes was closed with interrupted sutures. The patient was then removed to bed.

She had no sickness after the chloroform, which Mr. Childs attributed to her having taken two grains of opium two hours before the operation, and her sucking some ice during the morning. The opium was repeated at bed-time, and a catheter passed.

24th.—Patient passed a very comfortable night, sleeping a little; no pain or sickness; pulse quiet, 68; tongue clean; skin natural.

25th.—Still going on well. Pulse 68, soft. Takes nothing but a little ice.

26th.—Still going on well.

28th.—Some sutures removed; ordered wine ʒiv.

31st.—Patient rather restless and complaining of some pain; ordered two grains of opium immediately.

October 3.—All sutures and ligatures removed; wound nearly closed; slough removed; skin at the lower part of the wound somewhat excoriated; pulse 68. To continue wine, and take brandy ʒij.; ung. zinci to the wound.

4th.—Bowels have not been open since the operation. To have an enema of warm water, and take a quinine mixture.

5th.—Bowels open freely after the injection. Patient perfectly comfortable. Takes meat. Pulse 69; tongue clean and moist; excoriation nearly well; wishes to get up.

20th.—Gets up the greater part of every day. Eats, drinks, and sleeps well. Is going out soon.

OVARIAN DROPSY—OVARIOTOMY—DEATH IN THE THIRD WEEK.

(Under the care of Mr. HUTCHINSON.)

Mrs. B., aged 40, was admitted into the Hospital at Dr. Barnes' wish, under whose care she had been for ovarian dropsy. She had never been tapped. The tumour was large and freely fluctuating. Its existence had been recognised for about a year. There was the history of a sharp attack of peritonitis two months ago, during which the woman was for several days confined to her bed. After careful examination Dr. Barnes and Mr. Hutchinson agreed to advise ovariotomy, as the woman's health was rapidly giving way. They diagnosed the existence of adhesions, and believed the tumour to consist chiefly of one large cyst.

The operation was performed under chloroform in the usual manner. Extensive adhesions were encountered both anteriorly and laterally, and some in the pelvis were very firm indeed. The cyst itself was thin, and gave way at one point, allowing some of the contents to escape. The pedicle was secured in ligatures, and retained outside the wound. The blood and cyst fluid which had escaped were carefully sponged (with scalded sponge) out of the peritoneal cavity. The wound was closed with hare-lip pins.

The woman rallied well after the operation, and her progress during the first week was fairly satisfactory. She was fed chiefly by rectum, as her stomach was irritable. At the end of the first four days she began to take food fairly, and had no sickness, but her pulse was still quick. Subsequently, she complained much of pain in her left side, and then in the lower part of the belly. During the second week she got gradually lower. About the fourteenth day aphthæ appeared on the tongue, and she lost all appetite. She sank gradually, and died about the nineteenth day.

The wound was soundly healed. At the autopsy, several large collections of sero-purulent matter were found encysted by adhesions in different parts of the abdomen. In some of these the fluid was thick yellow pus; in others, thin and serous. There was no general peritonitis.

THE LONDON HOSPITAL.

OVARIAN TUMOUR—OVARIOTOMY—RECOVERY.

(Under the care of Mr. MAUNDER.)

M. H., aged 22, has always enjoyed good health until within the last nine months, when she ceased to menstruate. About six months since she noticed a hard swelling on the right side of the abdomen, which former has grown larger, and gradually extended towards the right side of this cavity. The patient came under Dr. Down's observation amongst the out-patients, when Mr. Maunder also saw her, and was of opinion, with Dr. Down, that the case was ovarian, and favourable for removal. Up to the moment of admission the patient followed the occupation of domestic servant.

September 16.—The tumour was removed to-day by a median incision below the umbilicus, made sufficiently large to admit the hand to sweep the surface of the swelling. From twenty-five to thirty pints of semi-gelatinous fluid were evacuated from three principal cysts, after that some slight adhesions to the anterior abdominal wall had been torn through. The operator being ably aided by his colleagues, Mr. Hutchinson and Mr. Couper, no fluid found its way into the abdominal cavity, and a small knuckle of intestine was alone seen. The multilocular cyst having been withdrawn, the pedicle was tied by a double ligature, and by a second to encircle the whole, and was kept in position by a pin transfixing it, behind the ligatures, as well as the edges of the wound. Sickness occurred during the operation, and persisted for some hours (being probably due to chloroform), and was followed by a troublesome pyrosis, lasting some days. The patient was fed per rectum for the first week, nothing but ice being allowed to pass the lips.

October 29.—To-day she leaves the Hospital, with the wound healed except at its inferior angle, whence a little pus occasionally issues. Great credit is due to Mr. Woodman, the House-Surgeon in charge, for the care and attention bestowed by him upon this case during the after-treatment.

SYPHILITIC AFFECTIONS OF THE NERVOUS SYSTEM.

CASES OF PARALYSIS ASSOCIATED WITH SYPHILIS.

(Continued from page 135.)

The following are cases in which, as our title expresses, paralysis was associated with syphilis. As we have before stated, we believe that the cause of the paralysis is very different in each case, and probably in none of them is due to mere syphilitic cachexia, but rather to some local disease produced by syphilis. The chief reason for giving together cases so varied in their direct cause is this, that it is of great importance, in reference to treatment, to be able to trace further back the direct cause to the general one—syphilis, and thus be able to attack the disease with more hope than we otherwise should have.

Case 12.—*Partial Paralysis of the Arm—History of Syphilis (Iritis, etc.)*—Jeremiah S., aged 35, was admitted, under the care of Dr. Hughlings Jackson, on July 9, 1861, for partial paralysis of the right arm. He could move it, but in the effort to grasp he could do little more than close his hand. He had also pain in this limb, which, he said, ran down into the fingers. He had also some pain in the head, with tenderness on pressure, but most in the neck, from which point he described the pain in his arm as originating. The sensation of the limb appeared to be normal. In both eyes were the remains of iritis, the pupils being irregular, and the sight impaired. The iritis—both eyes being affected at the same time—followed an attack of syphilis three or four years before. He had had syphilis several times. For six months after the syphilis he had rheumatism, which, by his description, appears to have been ordinary acute rheumatism. Dr. Jackson prescribed eight grains of the iodide of potassium three times a-day. On the man's next visit, one week after, he was remarkably improved. He had much less pain, and could grasp much more firmly. A fortnight later he was quite well.

Case 13.—*Partial Paralysis of the Arm—History of Syphilis—Necrosis of Frontal Bone—Great Improvement under Use of Antisyphilitics.*—Joseph G. was admitted, under the care of Mr. Hutchinson, at the Metropolitan Free Hospital on April 6, 1861. There was an open sore on the right forehead, at the bottom of which rough and worm-eaten bone appeared. It was ascertained also that the arm on the opposite side was partially paralysed. The man complained that it was much weaker than the other, and that he could not use it in his work. He found, too, that he had become lately dull and forgetful, and could sit for hours without speaking a word. His hearing was good on both sides, but occasionally a little "dizziness would come over his sight." Six years ago he had chancres, followed by constitutional symptoms, for which he was profusely salivated. He was again salivated three years ago. He had been married two years, and has one child aged eight months. The swelling on his right forehead appeared about eight months ago. Two months ago he was in a Metropolitan Hospital, when a suppurated node was opened. He has had much pain in the head—at times very severe indeed. Mr. Hutchinson prescribed the iodide of potassium, in ten-grain doses, three times a-day. In June Mr. Hutchinson removed a piece of bone. On July 26 the sore was granulating. He was much better in all respects, and could move his arm well.

In the *Dublin Hospital Gazette*, April 15, 1854, is a case recorded by Dr. McDowel:—

Case 14.—*Syphilitic Meningitis—Incomplete Paralysis—Disturbance of the Mental Faculties—Treatment by Mercury—Recovery.*—In this case, the patient, a sailor, aged 22, had, eight months before, primary syphilis, and when admitted, Jan. 4, 1854, had secondary rash. The man had not been treated by mercury. He came in for pains in his limbs, but had had pains in the back of his head, vertigo, etc. He was treated by iodide of potassium. On January 9 he had rather suddenly loss of power in both lower and in the right upper extremity, and during the night he became restless and delirious. He was at first treated by leeches and then by a course of calomel and James's powder. Under this treatment he gradually improved, and was discharged well. After he was well of the head symptoms he had dimness of vision, "depending on an inflammatory affection of the deeper-seated structures of the eye," while a fresh crop of eruptions appeared to a limited extent in the arms and legs, confirming anew the diagnosis previously arrived at.

Cases 15 and 16 are taken from Dr. Read's paper in the *Dublin Quarterly Journal.*

Case 15.—*Syphilitic Meningitis—Paraplegia—Hemiplegia—Amaurosis—Difficulty of Articulation, with Mental Habitude—Recovery under the Use of Antisyphilitic Remedies.*—The patient was a gentleman, aged 32, in whom there was a well-marked syphilitic history, both primary and secondary. The cure of the cerebral symptoms, under the use of mercury, and blisters to the scalp, was very rapid.

Case 16.—*Syphilitic Meningitis—Mental Incompetence—Incoherency—Suicidal Propensity—Paralysis.*—In this case the patient had been under Dr. Read's care for excavated ulcer of the throat, and subsequently for iritis. He was bled from the arm; purgatives and tartar emetic were given, and then mercury was administered. "In about four days mercurial action was established, the disease rapidly disappeared, and there was a perfect restoration of his mental and bodily functions." Dr. Read believed the symptoms to depend on syphilitic tumour of the dura mater. There was, however, he remarks, no further confirmatory history of syphilis.

Case 17.—*Necrosis of the Skull—Epileptic Fits—Trephining—Death—Autopsy.*—Jeremiah C., a married man, aged 50, was admitted into Petersham Ward, under the care of Mr. Cock, November 17, 1860, for necrosis of the skull. It was situated just at the union of the sagittal with the lambdoidal suture. On questioning him, he said he had had a fall when at the age of 15, and struck his head about the seat of mischief; but at the time he suffered very little from the injury. When about the age of 37 he had syphilis, and was treated at this Hospital by Mr. Bryant for secondary symptoms. From the time of his admission he has complained of (as he describes it) a bursting pain in his head, which has continued to increase. On Friday, the 28th, he had an epileptic fit; the pain has since been more severe, and he says he finds his memory leaving him.

Subsequently he had several fits. This induced Mr. Cock to trephine him. A piece of dead bone was removed. He improved, but relapsed again. The fits returned, and on one occasion he had an attack of hemiplegia. He died on April 16, 1861.

The following is Dr. Wilks' account of the Autopsy:—A wound on the vertex with sloughy edges, opposite to a hole in the cranium. This was at the back part of the left parietal bone. It was formed by two trephine holes and by the loss of a piece of bone which was about equal to two others. The edges of this were carious. The dura mater was easily separable from the inflammatory softening, but there had been some lymph effused. The dura mater was firmly adherent to the back part of the hemisphere; and on making a vertical section through this and the brain, a quantity of very hard and tough yellow lymph was found situated between them, and firmly binding them together. This material also infiltrated the grey matter, and destroyed a considerable part of the convolution as deep as the cineritious matter. Near this the cerebral structure was softened. There was also a point of softening in the thalamus of the right side. The crus cerebri appeared softened, and probably also some other parts. J. H. J.

ST. BARTHOLOMEW'S HOSPITAL.

CASES OF INJURY TO THE HEAD.

There are now in St. Bartholomew's Hospital, under the care of Mr. Wormald, several interesting cases of injury to the head. In reference to the first of which we shall speak, Mr. Wormald remarked to the students that no injury to the head, however slight, was to be considered unimportant, and that also many of the most apparently hopeless cases would terminate favourably. The subject of the first case was a man, aged about 20, who had received a blow on the left side of the anterior part of the frontal bone, detaching the skin and stripping off the periosteum. The patient was not in the least stunned by the blow, and soon after receiving the injury walked two miles to see a Surgeon, thus showing that in

this case there was no intra-eranial lesion. A piece of bone exfoliated, and the man had an attack of erysipelas. He has had, however, no cerebral symptoms. The wound is healing, and he feels well.

The next case was interesting in reference to several points. The patient, a woman, was 70 years of age. She fell, she says, fifteen feet, and pitched on the vertex. She was insensible, and continued more or less in a soporose condition for a fortnight. There was no depressed bone, and no bleeding from the ear. There was, however, hemiplegia, showing that some lesion had been incurred within the skull, and probably, as it was limited to one side, this lesion was at some point in or on the surface of the opposite hemisphere. There were, however, no convulsions of the affected side which so often attend on irritation of the surface of the hemiphere. There was strabismus, probably from injury to the sixth nerve, as there was no ptosis to indicate that the third nerve was affected. The hemiplegia was on the left side; the face, arm, and leg were affected. It was not ascertained to which eye the defective motion inducing strabismus was due. There was no deafness, no discharge from the ear, and the orbicularis had not been paralysed, so that the paralysis was not due to lesion of the trunk of the portio dura. We know that in simple disease of the brain itself inducing hemiplegia the orbiculari always escape, because the fibres of the portio dura supplying this musele do not go so high up in the brain as the rest. In this case, then, there was probably either some disease on the surface or in the substance of the hemisphere, causing, as an apoplectic effusion would, paralysis on the opposite side. This patient, who was admitted on August 29, is now nearly well. All that remains is a little weakness of the arm.

The next case is at the other extreme of life. A boy, four years old, fell down and bruised his head a little above the position of the frontal eminence. He was a little stunned at first, but was soon, except for the wound, about the size of a sixpence, apparently well, and continued so for about ten days, when, rather suddenly, febrile symptoms came on, followed by insensibility and convulsions. The convulsions, in this case, were limited to the left side of the body, being as usual the one opposite the injury. The convulsive attacks came on many times in the day for two or three days, and each paroxysm lasted about half an hour. Mr. Wormald ordered calomel to be given three times a-day. Under the use of this he rapidly improved. It was then discontinued, and he again relapsed, becoming again convulsed on the same side and in the same manner. On resuming the calomel, these symptoms again subsided. The child has now only a little, or scarcely any, weakness of the left arm. There is no distortion of the mouth.

Medical Times and Gazette.

SATURDAY, NOVEMBER 2.

ARNOTT ON HUMAN PROGRESS.

Some Saturday afternoon, when the week's work is done, and you are philosophically and thankfully about to give yourself up for twenty-four hours to ease, and recreation, and devotion, by way of fitting preparation you drive down to Brompton, and with slippered feet and passive will, pass through the several processes now well known to the many frequenters of the so-called Turkish Baths. There, as you recline on your couch in the cooling room, you find yourself face to face with one of the puzzles of human life. For the last half-hour your fancy has been carrying you back to ancient Rome, or away to distant countries to which you hardly grant the character of civilized, and more or less satisfied with what you have just accomplished as your share of the world's work, and sensible of the great luxury of the present moment, you are in a frame of mind quite complacent and humble enough to admit that, after all, you have been wise in doing exactly what Cicero and his friends used to do, and exactly what is now going on all day among the lazy Turks and Egyptians. And yet, on the table at your elbow, one of the first things that meets your sight as you listlessly push aside the empty coffee-cup, is a copy of Dr. Neil Arnott's "Survey of Human Progress." You mutter to yourself the words, "Human progress," and feel a clashing with your previous train of thought. The discord rouses you to a timely and salutary mood of inquiry and speculation. Can it be a fact that we are going two ways at once? Does there not seem to be a contradiction here? Man making progress that admits of survey, and yet going back to long distant ages to copy habits and customs said to be vastly better than those of the present day. What can be the course of human progress? Is it a circle or a cycloid perpetually traversing the same track or tending towards the same point? Is this progress after all anything real, or is it only a dream of enthusiasts giddy with gazing on a ceaseless spinning? Men who can span over in memory the lapse of some thirty years, and who still bear traces of the influence that Dr. Arnott held over the budding intellect of that time, are quite willing under any perplexity, and especially when mind and body too are in a state of subsidence from the turmoil of straining activity, to put themselves under the guidance of such a sage. They are sure enough that when he says "progress," he does not mean a mere round-about motion; and that, in spite of the revival or adoption of Turkish or Roman baths, he being judge, we are a-head of Ancients and Heathens. Long before you leave the Frigidarium the phantom puzzle has vanished, and the line of human progress stands out neither straight nor simply curving, but as a broken, irregular zig-zag, sometimes returning on itself or stretching out widely into unexpected regions, yet ever gaining in force and boldness. Civilization is a complex, universal fact, a reality which has been passed on from age to age, and from people to people, growing in its progress, and blessing each succeeding group of possessors with larger and larger measures of happiness. This is a comfortable assurance for us who come so late in the story of the world's history. Guizot's rich and full view of the subject gave us a lasting glow of admiration and thankfulness; but we, nevertheless, turn gladly to hear what may be said by our calm and venerable English philosopher. Now let us see what is the pith of his testimony and counsel.

Dr. Arnott bids us go with him to some high place, some pinnacle of the temple, from which we "may view not only a part, but the whole of man's earthly abode, and not only as things are now, but as they have been in past times, and to some extent as they are likely to be in the future." He bids us look down upon the tribes of beasts that perish, and see them enjoying existence, generation after generation, in the same changeless way, making no progress, and undergoing only some unappreciable Darwinian transformation, by the silent operation of surrounding causes in the course of indefinite ages. He bids us look upon the painted savage in his wattled hut, feeding upon herbs and roots, and such of the most helpless creatures about him as his low cunning, and rude flint weapons enable him to overpower. The scene shifts a little, and we see man speaking with man. Society is formed. The artless splendour of barbaric pomp, the wassail, and the banquet, take the place of nakedness and starvation. The romance of mediæval life follows; and then, ushered in by the voices of some Shakspere or Milton, comes the full burst of civilization with its literature, its arts, sciences, and refinement. Now, what is the reason of this difference? Man is inferior to other animals in bodily strength and keenness of sense. He can neither grapple with the gorilla, run with the deer, see with the owl, nor smell with the hound. The power that bends other wills to his own,

that moulds and fashions mere matter into forms of beauty and of use, that gives to man the mine and the minster, the rifle and the telescope, the steam-engine and the telegraph, is the power of the mind. Men, stimulated by their natural wants, and using their faculties of mind and body to supply these, as they must, from around them, have gradually discovered that all the things or objects in nature are but repetitions or multiplications of a few great kinds, conveniently classified, as the three kingdoms, called *Animal*, *Vegetable*, and *Mineral*; and further, they have discovered that all the changes or motions incessantly going on among these objects are of but four great kinds, which they have called *Mechanical*, *Chemical*, *Vital*, and *Mental*. The study of the typical examples from these classified groups of things and conditions, has led to the practical application of knowledge in the various mechanical arts, manufactures, agricultural operations, methods of education, social training and government. Here is civilization. But all this comes to pass slowly and step by step. In the first place natural aptitudes show themselves. Peculiarities of age, strength, courage, and ability, fit men for different kinds of labour. Special training and constant experience lead to the skill which shortens the road to any given result. Combined workmanship almost miraculously multiplies the produce of labour. Combination involves the modification of tools and the invention of machinery. Machinery enables man to obtain help, not only from some of the inferior animals, as horses, oxen, and camels, but also from the great inanimate forces of nature in waterfalls, wind, steam, and electricity. This wise subdivision of labour and skilful co-operation bring forth abundance and cheapness—every form of material prosperity and intellectual enjoyment. Barter and commerce are now necessary, and must be facilitated by markets, money, and all the appliances for the profitable use of wealth. Population then becomes subject to many newly created influences and artificial laws. Might no longer acts as right. The father of the family gives place to the magistrate. Government, by a system of laws, controls the conduct both of kings and people. Nations as well as men are brought within the power of the same grasp of united wisdom. The civilization of modern times is the accumulated result of these processes many times repeated. The lines have fallen into each other during succeeding ages, till that which marks the progress in our own day and country is happily stronger than it ever was before. Traditions, preserved in the immortal poem of Ferdoosee and some of the writers of Greece, lead us back along the route of the migrations of the Caucasian race to the splendours of a mighty and extensive empire in Bactria. Even now, among the Parsees of India, we see the last rays of the glory of its Zoroaster, and through them we may trace our relation with the first known link of civilization. The marvellous remains of Babylon and Assyria tell their own tale of conquest and dominion, of luxury and science, of kings, princes, and wise men. Egypt, in her greatness and decay, taught us the evils of a system of castes, and the inevitable check to human progress from a purely sacerdotal domination. Phœnicia had Tyre and Sidon for her cities, Carthage among her colonies, and her merchants were princes. The lands between the Indus and the Mediterranean saw the rise and fall of the Medes and Persians. Divine favour brought the magnificence of Eastern monarchy to its culminating point in the persons of the Jewish Kings, David and Solomon. All are familiar with the wondrous stories of Greece and Rome. The Republics of Southern Europe had their special triumphs, though they show us what a principle of weakness existed in the parcelling out of power and territory. And coming to modern times, instead of a stream of civilization meandering hither and thither, we have a tidal wave which spreads with ever-growing rapidity over the continents of Europe and America, our possessions in the East, and at the Antipodes.

And here we must observe, that a certain share of the work of civilization falls to the lot of every man, and for this work he ought to be specially trained. "That persons may be fit members of any club or company of people associated for a common purpose, as a party of emigrants going to a new colony, common-sense sees that they must have knowledge and conduct in relation to the following six particulars:—

"1. The language of the party, and how they count and measure.

"2. The nature of the country, and of the population of which they form a part.

"3. Any dangers to health existing.

"4. The regulations or laws made for the government of the company.

"5. Skill in one or more of the kinds of labour, bodily or mental, required for the welfare of the company.

"6. Anticipation of a happy future."

Now, these six particulars are also those which, viewed more widely, constitute the whole essential education of the members of the larger club, or company, called a civilized nation. They there receive the technical names of—

1. Literature and Mathematics.
2. Geography and History.
3. Physiology and Hygiene.
4. Government and Laws.
5. Science and Art.
6. Theology and Religion.

Dr. Arnott endeavours to estimate the actual state of education in England in regard to these matters. He points out the errors and short-comings, and urges many rational improvements. Civilization could not have been raised in the world to its present state if much had not been done; but it is our business to do more, and to take care that what is done is done perfectly. And we have every spur and encouragement to this; "for, seeing what marvellous advance in civilization has already sprung from man's increasing knowledge of Nature, although the art of diffusing such knowledge by education has been very imperfect, the mind looks cheerfully forward to what must yet come when better education shall enable the people to turn to full account the capabilities of this glorious universe, in which it has pleased Divine goodness for a time to place them. The feeling of the duly-instructed man towards his Creator is not the abject terror of the slave before the hard master, but like that of the favoured child approaching with delight a wise and indulgent father."

THE WEEK.

When Dr. Dauglish's aërated bread was first introduced to us, two or three years ago, we all welcomed it as an agreeable variety at the breakfast-table, and we regretted its disappearance. We shall be glad to hear that it is again brought into the market, although we must protest against some of the statements which have been published by too partial friends, both in favour of it, and in depreciation of the bread furnished by the regular baker. Science is very apt to be blinded when there is a commercial element involved. It is confessed by the advocates of the aërated bread, that a very small quantity of organic matter in the water employed, sets a peculiar fermentation going, and gives a musty taste to the bread. It is further alleged that the flavour of musty and inferior flour cannot be hidden by the aërating process, as it can by fermentation; and these are serious reasons in favour of fermenting the poor man's loaf, inasmuch as absolutely pure water and the best flour are not always accessible. Moreover, it is alleged that from three to six per cent. of flour is spoiled in the common fermentation,—a statement which requires con-

firmation. It is said, further, that the branny portions of the flour can be further utilized by the aërating process, whereas civilised man, by a universal instinct, chooses the whitest and most nutritious parts of the flour, and leaves the bran (spite of the nitrogenous composition of the cerealin which it contains) to animals with more capacious bowels and smaller brains. We shall be glad to see any improvement in bread-making; but after all, it is of no use to argue about it; the stomach will decide the question; and we would remind speculators, that *à-priori* arguments in favour of food are often set aside by the stomach, which is an organ with an obstinate predilection for the empirical philosophy.

By a law in the foundation of the National Hospital for Epilepsy and Paralysis, the Physicians must give not less than four lectures annually on epilepsy and paralysis. Dr. Ramskill commenced the course of this year on Friday, October 25, and will continue on every alternate Friday at four o'clock. Dr. Brown-Séquard gave a similar series last year. Students and Medical men are admitted on presenting their cards. Dr. Ramskill's four lectures of this year will appear in our pages; and we feel quite sure that our readers will find in them many valuable practical hints, in addition to numerous interesting illustrations of the relations between the physiology of the nervous system and the diagnosis of disease.

We have received copies of the Examination Papers prepared for the Examination in Arts at the Apothecaries' Hall, Dublin, by Drs. Moore and Atkinson, the Special Examiners. They consist of passages from Greek and Latin prose and poetical writers, and of French for translation into English, and English into French, besides Euclid, Algebra, and English history and composition. We only hope that society will give credit to the juvenile candidates for the good education which they must have received in order to enable them to answer such a set of questions.

The charge against Mr. Mansel, a member of our Profession and a magistrate, who refused to give evidence in a case in which some meat had been seized, has been dismissed. It appears that a man who has not been summoned, is not compellable to be sworn and give evidence. If summoned, and his expenses are not paid, a scientific witness need not attend; but if he attend and "appear to the summons" he is compellable to give evidence, whether his expenses have been paid or tendered or not. So we learn from an opinion of the Editor of the *Justice of the Peace*, quoted in *Potter's Electric News* of October 23.

A very serious practical grievance is occasioned by a portion of the recent regulations of the Indian Army:—

Extract from the Secretary of State's letter, No. 397, of October 31, 1860:—"In future it must be laid down that no time passed out of India will be reckoned towards the qualification for the rank of Surgeon Major, beyond the proportion of furlough, which is now, or may be, allowed to reckon as service for retiring pension."

Thus it will happen that if any Medical Officer serve in an unhealthy climate, and so incur the necessity of going to Europe for the restoration of his health, he may be superseded by his juniors, who have had the good fortune to serve in healthier situations. Thus, ill-health, consequent on hard labour, is treated like a crime. This point is well put in a petition from Mr. Thomas Brooks Larkins, F.R.C.S., Surgeon in the Bombay Medical Establishment, to Sir Charles Wood:—

"Your memorialist begs respectfully and especially to point out that supercession, or the loss of steps in a seniority list, is a punishment awarded by courts martial for unofficer like or ungentlemanly conduct, and your memorialist is fully convinced it could never have been contemplated that an officer, who had obtained sick leave to Europe, under the regulations which guaranteed that his position and standing in the service should remain intact,—and on the faith of which he availed himself of the leave granted him by Government,—should by a regulation subsequently made, pay a penalty equivalent to punishment for misconduct, in consequence of his having exceeded a furlough of two years in a total service of twenty years. Yet such is the position in which your memorialist is placed under the terms of the Order quoted in the first paragraph of this memorial."

At a meeting held on Saturday, the 26th ult., the Board of Trinity College, Dublin, elected Dr. Robert Adams to the University Professorship of Surgery, vacant by the death of Dr. Cusack. The selection for this honourable distinction of one who has so long, so extensively, and so successfully laboured for the advancement of Surgical Science as Dr. Adams has done, will, we have no doubt, give general satisfaction to the Profession, not only at home, but also abroad, where his numerous and important contributions to Surgical literature have rendered his name well known. The above Professorship, corresponding to the Regius Professorship of Physic, was founded in 1852 on the institution by the University of a licence in Surgery, subsequently to which the full degree of Master in Surgery, requiring a previous degree in Arts, was created, Dublin thus taking the initiative in modern times in conferring on Surgery full academic rank. We may mention that the Degree of Master in Surgery carries with it the Parliamentary elective franchise. The duties of the University Professor are to examine for degrees and licences in Surgery, to preside at the examinations, and to present the candidates at the Commencements to the Chancellor. Dr. Adams has on more than one occasion been President of the Royal College of Surgeons in Ireland and is a Master of Arts and Doctor of Medicine of the University.

Medicine has lost another of her best and most estimable sons. Mr. Simon Rood Pittard, Curator of the Museum of Natural History at Sydney, New South Wales, has been removed from our ranks after a career only too short to be really great. Mr. Pittard was educated at King's College, of which he was an Associate. Soon after the commencement of his Professional life, his mind began to be directed to natural history studies. He gained by competition the anatomical studentship of the Royal College of Surgeons, worked assiduously under the late Professor Quekett, in the formation of the histological department of the Museum, and in all his labours there acquitted himself with zeal and industry. He was also intimately connected with Dr. Todd in the "Cyclopædia of Anatomy and Physiology." To this work he contributed several papers, and towards the completion of the volumes exercised a kind of sub-editorial management, which greatly facilitated the progress of the work towards its end. Some time after leaving the College of Surgeons, Mr. Pittard moved into St. George's-in-the-East, where he may be said to have practised, but in truth, his mind was too much occupied with pure science, and with the contemplation of life and organization as philosophical problems, to allow of his obtaining any marked success in the details of practical Medicine and Surgery. After the passing of the Act for the appointment of Medical Officers of Health in the metropolis, Mr. Pittard competed successfully for this office in St. George's-in-the-East, and carried out his duties with so much intelligence and courage, that his labours became too good for all the rulers of his parish. Nevertheless, he fought on, and so long as he remained in England, continued at his post. In 1857-58, Mr. Pittard was appointed Teacher of Practical

Anatomy in the Grosvenor-place School of Medicine, and here found work so congenial to his tastes, that he left his residence in Wellclose-square and repaired to Chelsea, that he might be nearer to the scene of his duties as a teacher. From the first, his instruction was warmly appreciated, and we, who knew him well in his new capacity, may state honestly our belief that had he continued, he would ultimately have filled the place (long vacant in England, by the way,) of a really great anatomical teacher. But this was not to be. The Curatorship of the Australian Museum, offered to him through the kindness of Professor Owen, was not to be resisted. In 1859, full of heart and hope, he went to his new labours, and in the continuance of them closed his career. The world of science may well regret the loss of so enthusiastic a labourer as our friend and brother. They who knew nothing of him personally may have their regrets on this score. But they who knew him, not only as a man of science, but as a friend and companion, have much added to their sorrow. There was surely never a more genial soul than Simon Rood Pittard; his mirth rested only to give place to his industry, and his industry to give place to his mirth. He told the best stories, laughed the best laugh, and, when allowed, made the most genial merriment in every circle, large or small. Without any pretence at learning, he conversed on every learned subject, and, having apparently no idea of his own originality of mind, dropped, accidentally as it were, the most original thoughts; even his face was sufficient to recall an ideal which the pencil of one of our great masters has fixed indelibly on the mind. It is hard, indeed, in such brief notice as this, to depict him all in all. We have yet a painful part to state. Mr. Pittard was not resident long enough in Australia to realize the hopes he had entertained of success and advancement. He has, therefore, left his wife and eight children in such a position that Professor Owen has felt it incumbent on him to ask the assistance of the Profession on her and their behalf. We doubt not that the response will be as hearty as it is deserved.

With a low state of mortality at present, so far as general causes are concerned, the number of deaths from scarlatina is such as to demand inquiry. We have made inquiry amongst Medical Officers of Health, who naturally consider themselves responsible, and we learn that the scarlatina mortality is almost exclusively prevalent among the children of the lower orders, and arises from certain definite causes, which, unfortunately, cannot be got rid of by whitewash, or drainage, or the common sanitary remedies. These are: ignorance, helplessness, and apathy. The poor will not force their children to swallow medicine and nourishment; the kind of control which an educated person would enforce over his own children, would be denounced by them as cruel; and therefore their children are let sink under exhaustion, whilst a rich man's child would be saved by the forcible passing of wine down its throat. They obstinately rebel at all notions of hot baths, or of washing a sick child. They denounce the Medical attendant for swabbing out the throat. They surround the patient with visitors who absorb all the fresh air. Thus the excellent Medical attendance, and the lavish supply of medicines, and of wine, which are provided by Parishes and Dispensaries, are wasted. In the parish of St. George's, Hanover-square, a young man, ill of fever, was allowed by his family to get out of bed, and wander about the house, cold and naked. They tried to tie him with ropes, but could not understand nor practise the simple method of sitting by him, and gently restraining his first efforts to rise, or pacifying him by a change of pillows. He died in the street, on his way to the Fever Hospital. Another, a child, in the same locality, whose life had been saved almost by a miracle, was found one evening, late, with its bed surrounded by eight adults, in a very small room; doors and windows shut; atmosphere execrable. The parents had been told to keep the door open. Now, the remedy for these things is a nurse, to follow the Doctor, and see that his directions are carried out. What Hospital Physician would take his responsibility without a nurse to carry out his orders? We may call them "sisters" or "nurses," and dress them how we please; but in any epidemic like the present, the children of the poor will die by hundreds, unless they can have a tender, and judicious, and firm nurse to carry out the orders and administer the remedies which the Doctor orders. We need besides an extension of some system for visiting the poor at home. The out-patient department of Hospitals and Dispensaries may do for chronic cases; but the lives of sick children are often sacrificed by taking them out to a Dispensary in an acute illness; and it is, besides, odious to think of a child with scarlatina rash, kept for an hour in the close, crowded waiting-room of a Dispensary.

REVIEWS.

A Treatise on the Surgical Diseases of the Eye. By H. Haynes Walton, F.R.C.S.E., Surgeon to the Central London Ophthalmic Hospital, and to St. Mary's Hospital, Paddington. Pp. 686. London: 1861.

This is a new edition of Mr. Walton's "Ophthalmic Surgery," a work which first saw the light seven or eight years ago, and has acquired good repute as a careful, complete, and thoroughly practical guide to the Operative Surgery of the Eye. The present is, as we are told, a new edition in the fullest sense of the word. A History of Ophthalmic Surgery which occupied forty-six pages, has been sacrificed, and the space gained has been devoted to new wood-cuts, to an account of the ophthalmoscope and iridectomy, and other modern innovations or improvements, and to a general revision of the text, and incorporation of new matter.

We begin with a practical Chapter on the Use of Chloroform in Ophthalmic Surgery; with ample directions for its safe administration; and a eulogium on the advantages it gives to modern Surgeons, especially in the treatment of infants and refractory persons. "In former times," says Mr. Walton, "the operation for congenital cataract was frequently delayed, and the posterior operation for solution often advised, instead of the anterior. The operation was sometimes left unfinished, the capsule not being properly removed; and it was often and injuriously repeated, because of the difficulty of obtaining the requisite steadiness. Patients were formerly confined by strange mechanical contrivances, or wrapped in tablecloths and held by numerous assistants, or even bled till they fainted, in order to obtain a passive state. Now, chloroform, when properly administered, secures a profound repose, during which the dexterous Surgeon completes his manœuvres in the shortest possible time, and so gives the delicate organ the best chance of complete recovery." Nevertheless, when an adult patient has entire self-control, Mr. Walton prefers that he retain his senses during the extraction of cataract, for then he believes that the crystalline lens is better started from its position, and escapes more readily; the pupil is sooner restored to its natural state, and the iris is less liable to prolapse after the terrible stretching it receives. Besides, in the feeble state in which the stomach and heart are often found, in advanced life, Mr. Walton would rather not complicate a case of difficult recovery by setting up vomiting or running risk of syncope.

After a short Chapter on the Eye-Douche, we have one on Instruments in General, on the perfection of which the facility of operating must depend. Mr. Walton is an advocate for small light instruments, with round, smooth handles, and remarks that in no craft save Surgery do the artisans employ tools with roughened handles.

The subject of injuries of the eye, in all its varieties, is very completely handled. Ecchymosis, or black eye, is recommended to be, for the most part, left to Nature, and most of the remedies in popular use are believed to be useful only so far as they are harmless. The effects of blows

on the eyeball and its vicinity, and their consequences are very elaborately described. The worst effects as regards sight may follow, it is said, from a blow on the eyebrow, without the eyeball having been touched. These mischiefs were, till quite lately, ascribed to concussion of the retina, with or without spasmodic action of the orbital muscles: in assuming which the copious bed of fat in the orbit was completely ignored. When wounds about the circumference of the orbit were followed by blindness, the nutrition of the eye was supposed to be damaged through lesion of some branch of the ophthalmic division of the fifth nerve, ramifying on the face. Dr. Mackenzie even supposed that an inflammatory condition of the branches of the injured nerve travelled up to the brain, and thence, by a reflex route, to the optic nerve. Hence he advised, when injury to the fifth nerve was suspected, that the patient should be treated antiphlogistically, and the system be affected by calomel and opium. Many an eye there was whose loss was ascribed to injury of the fifth nerve, and conversely, some persons, whose fifth nerve was injured, pretended that they had lost an eye. Mr. Walton gives a rather severe account of a trial at Guildhall, in which a watchmaker sought to recover damages from the London and North-Western Railway for probable loss of eyesight, after a small superficial wound of the eyebrow. There was no doubt that some of the branches of the supra-orbital nerve had been divided in this case, and that there was slight anæsthesia of a portion of the scalp. But one of the watchmaker's surgical witnesses stated that there was a probability of blindness as an ultimate consequence. "This produced a great impression on the jury." The Chief Baron elicited from this witness that he spoke, not from his own experience, but from the records of Surgery, which his Lordship declared to contain many things that are worthless; and then Mr. Skey and Mr. Walton gave their evidence against this hypothesis, Mr. Walton declaring "that mere injury to the nerve-branch on the head can have no influence on the function of the retina, and that loss of sight, when associated with such an injury, is due to coincident injury of the eyeball," and that if it does not come on soon, it is very unlikely to come on at all.

It is through the ophthalmoscope that the detection of the true nature of these injuries is to be made. This shows that blindness is due not to mere concussion or sympathy, but to palpable physical change, the result of injury, or of inflammation, or both; and the knowledge of physical condition, in this as in other cases, if it does not lead to the employment of useful remedies, at least prevents a course of useless or injurious ones. For instance: A middle aged workman was struck on his forehead over the left eyebrow six years ago and quickly lost his sight. By the time the swelling of the eyebrow and the ecchymosis had vanished, the eye was useless. The poor man went from Hospital to Hospital, and even to some of the "Special" Hospitals, and was subjected to every conceivable method of treatment; but he derived no benefit, and the ophthalmoscope showed why. The retina was detached, and the eye disorganised. Far better would it have been, says Mr. Walton, for the patient and for the honour of Surgery had this been made out earlier.

The occurrence of inflammation after injury, and the treatment of inflammations, both traumatic and specific, is then noticed, and reference is made to Dr. Jacob's most valuable little work on "Inflammation of the Eyeball." The circumstances under which blood may be taken; the use of mercury, which we are glad to find Mr. Walton employs, and yet in very small doses; the benefits of atropine and of evacuation of the aqueous humour, are all laid before the reader as they only can be by a man who is accustomed to deal practically with the whole of surgery, as well as with the special subjects of this volume.

Passing over the various burns, blows, lacerations, and intrusion of foreign bodies, we come to a very interesting chapter on sympathetic inflammation of the eyeball; a very grave result of wounds and injuries which seems to have been first practically recognised by Mr. Barton, of Manchester. Mr. Barton met with several instances of portions of copper caps imbedded within the eyeball. Severe inflammation of the injured eye followed; but this was not all; for the other eye began to lose its powers and utter blindness was imminent. By excising the cornea, however, the foreign body escaped, the disorganised eye was pacified, and the other eye was saved.

It appears that there is no serious injury of one eye which may not be followed by sympathetic ophthalmia of the other; and the same effect may follow from staphyloma and other consequences of inflammatory action, or from the presence of an old degenerated crystalline lens. The complication may appear early, or may make its appearance at any time whilst the irritation of the injured organ exists.

The symptoms may be very various. There may be pain, or none. Intolerance of light is usual at first. Loss of accurate sight, muscæ, flashes, stars, changes in the iris, and softening of the eyeball, are later and worse manifestations. Mr. R. Taylor, whose friendly offices Mr. Walton continually and gratefully refers to, has demonstrated how completely the whole eye may be disorganised. In one case, the anterior chamber was filled with a cake of solid lymph. The lens was hazy. Immediately under the capsule was a layer of bodies spheroidal in figure, tinged blue by iodine, and presenting a well-marked cross under the influence of polarised light. They were, therefore, specimens of the amyloid bodies, generated during certain stages of degeneration of tissues. Such is a disease which "no general treatment, no local application, no dietary system, is of avail in checking. The affection can be stopped or subdued only by surgical treatment. A portion of the eyeball must be removed, whereby the products which have set up the irritation, or the cretaceous or ossified tissue which has acted as a foreign body, may be got rid of; or extirpation may be resorted to. When done early, this practice works wonders. If adopted before the sympathetic action has induced palpable structural changes, it will be all effectual. At later stages, it may arrest progress and stay the destruction."

The operation to be adopted may either be "abscission" of the anterior part of the eyeball, or extirpation of the eye within the ocular sheath. Of these operations, Mr. Walton intimates very clearly that the former is the better for the patient, though the latter is the more brilliant for the ambitious Surgeon. Abscission is much less severe, leads to earlier recovery, and gives the patient a stump to wear an artificial eye upon, or less deformity even if he wear none. It is, he thinks, equally effectual for the cure of the disease,—a practical point on which we differ from him.

We have been beguiled into a longer analysis than we intended of sympathetic ophthalmia, because no Surgeon, in any field of practice, may not expect to meet with it. With respect to the remainder of the work, we can only say that the various deformities of the lids and the operations for their cure; the several kinds of tumour and cancer around and within the eye; the staphylomatous protrusions of the globe; the diseases of the lachrymal apparatus; conical cornea, and squinting; extirpation of the eye, and of the whole contents of the orbit; artificial eyes, entozoa, cataract, artificial pupil, and the use of the ophthalmoscope, are all treated of simply, fully, and practically. The Author, too, is by no means affected with a mania for operating, and says plainly that some eyes have been needlessly extirpated. On the subject of iridectomy, the reader will find a dispassionate, though neither a complete nor a favourable, account of the operation; and whether he agree with Mr. Walton or no, he will find the several conditions in which the eye is placed by iridectomy rigorously analysed, and thus will be assisted to form his own opinion on the controverted merits of this operation.

Medical Misfortunes in America.—"Manhattan," the correspondent of the *Standard*, describing a visit to a Lunatic Asylum, says:—"After we had seen most of the females, we passed into the building devoted to the male maniacs. Almost the first man my eyes lighted upon was an old friend, Dr. H———, who, singularly enough, was at one time the head of the Bellevue Hospital, and had thousands under his charge. No one was more respected. He left Medical life, and started a paper at Fishkill. A few months ago the mob went to his office, and dragged him out, on account of a Secession article that had appeared in the columns of his paper. The effect has been terrible. He is a hopeless maniac, but harmless. He sits upon a bench, looking an object of despair. He gazes wildly in the direction of a voice, but makes no reply. He is unconscious of anything. He is but one out of thousands of families that this rebellion will bring to misery in the North and South. The next case was Professor D———, analytical and consulting chemist, and one of our most promising citizens.

FOREIGN CORRESPONDENCE.

GERMANY.

BERLIN, September 20.

ON THE TREATMENT OF PYÆMIA AND HOSPITAL GANGRENE.

ON August 3 the Medico-Chirurgical Institution for the Education of Army-Surgeons celebrated the anniversary of its foundation, on which occasion Professor Jüngken, one of our oldest and most experienced Surgeons, delivered an oration on Pyæmia and Hospital Gangrene, from which I select the remarks made by him on the treatment of these affections.

These diseases, said the venerable Professor, are more easily prevented than cured. For prevention, it is necessary that the most scrupulous cleanliness should be rigorously carried out in the treatment of the wounded, and, where many patients with ulcerations are congregated in rooms, thorough ventilation should be attended to. Where the Surgeon has the choice, he should object to the reception of a large number of wounded persons in one common ward, as this is only too often the cause of pyæmia and Hospital gangrene. Where there are no other contrivances for ventilation, the doors and windows should be opened, even if the patients complain of cold. The patients should also be frequently bathed. If the wounds are severe and the suppuration considerable, the perpetual bath is very useful for preventing these diseases; but the water should be often changed so that it does not become impregnated with the pus. Local baths, where they can be had, are also very useful; otherwise, a half or a whole bath ought to be given. Concerning local baths, Professor Jüngken condemns such tubs as are furnished with caoutchouc rings, through which the limbs are put, as, in order to prevent the water from flowing out of the tub, the caoutchouc ring must fit the limb so closely that the veins thereby become compressed, and thus a free circulation is impeded and mortification induced. If the bath is to be useful to the patient, the limb must rest in the water quite free and without any troublesome pressure. Fumigations with chlorine or vinegar are only feeble palliative means, which may be applied where no fresh and pure air is to be had. If fumigations must be made, those recommended by Guyton with chlorine are preferable to those with vinegar; but they never purify the air of sick-rooms so thoroughly as is done by fresh air, and in many patients they produce troublesome symptoms on the part of the respiratory organs.

As wars are generally undertaken in the warm, fine seasons, this being favourable to the movements of large armies, it is just at this season that great numbers of wounded have to be treated. The locality of great battles being dependent upon accidents which cannot be foreseen, the Surgeon generally finds himself under the necessity to provide accommodation for the wounded in rooms not at all suitable for the purpose. In order, therefore, to prevent pyæmia and Hospital gangrene under such circumstances, the Surgeon ought to prescribe the air-bath, that is, to order the wounded to be placed in the open air under linen tents.

Delpech, the great French Surgeon, did not recommend the air-bath so strongly as Brugmanns, who was the first to employ it; but he erred in employing the air-bath alone, without other remedies, for the cure of Hospital gangrene. According to Professor Jüngken, there is no specific remedy for this obstinate and dangerous affection, which could, exclusive of all others, effect a complete cure. Not even the actual cautery is able to do this, although it is the most powerful of all remedies offered to us for combating this affection; but even if we cauterise a gangrenous wound as deeply as possible, and the patient is still left in a contaminated atmosphere, the ulcer will again present a gangrenous aspect as soon as the eschara has come away.

The air-bath is just as important in pyæmia as it is in Hospital gangrene, especially if it is possible to place the patient under foliated trees, the exhalations of which are known to have a beneficial effect. In many desperate cases of pyæmia and nosocomial gangrene, where every means had been employed in vain, and the patients seemed past hope, an immediate change for the better was perceived after Professor Jüngken had ordered them to be taken out of the Surgical wards of the Charité Hospital, into the gardens adjoining this Institution, where they were placed on a simple couch, covered with a blanket, and left in the open air for the rest of the day. Other remedies which had until then been employed in vain now took effect, and the Professor thus succeeded in saving wounded persons who must otherwise have certainly perished.

Professor Jüngken found a striking confirmation of these views during the revolution in Dresden, when a sanguinary struggle took place between the insurgents and the soldiers. Many of those wounded on this occasion were brought into the palace belonging to Count Marcolini, in which the saloons are furnished with very large windows, reaching to the bottom, and which looked upon a beautiful garden filled with splendid old lime-trees. Whenever the weather permitted, those most dangerously wounded were carried on their beds into the garden, and spent the whole day under the trees. The results were strikingly favourable. It is, after all, better that the patient should shiver a little in a cold but pure air, than that he should die in a warm but poisoned atmosphere.

It is also of great importance, to prevent any intercourse between those affected with Hospital gangrene and others. The bandages and instruments which have been employed for gangrenous wounds ought not, if possible, to be employed a second time, as the severity of the sufferings is thereby increased in those already affected, and others may receive the contagion in this way. Bandages, linen, or clothing, etc., should not be kept in rooms where patients so infected lie, neither should lint, etc., be prepared there. A frequent change of the bedding, blankets, and linen of such patients is also of the greatest utility.

Among the large number of local remedies which have from time to time been recommended for Hospital gangrene, the more effective are perchloride of iron, the acidum pyro-lignosum, chloride of lime, hydrochloric acid, carbon powder with chloride of zinc, myrrh and camphor (℞ Carb. lign. pil. ʒ. myrrh ʒj. camph. ras ʒss. zinc. chlo. gr. v. in f. pulv.), and chloride of zinc in solution. Of all the other remedies little or nothing is to be expected. But the medicines just mentioned have not the same effect at all times. There are periods in which chloride of lime is particularly effective, and when no other remedial agents will answer the purpose; at other periods chloride of lime entirely fails, and carbon powder or acidum pyro-lignosum produce good results, so that it is probable that, in spite of the similarity and even apparent identity of symptoms observed, there must be some peculiar differences in the several epidemics of Hospital gangrene, which are at present only to be recognised by the success and failure of certain remedies.

There is only one remedy for this terrible disease, which never fails the Surgeon, provided it is properly used, and that the other circumstances, such as light, air, etc., are favourable: this is the actual cautery, which has of late been unjustifiably neglected, but is believed by Professor Jüngken to be the only certain and reliable means for destroying the peculiar and dangerous contagion of Hospital gangrene. To neglect the actual cautery under such circumstances, is not only to do harm to the infected patients, but also to those not yet attacked, as the contagion will then no doubt spread further, and become more dangerous. The Surgeon ought to be the readier to employ the actual cautery, as the patient may be put under the influence of chloroform, and thus be spared much suffering during the operation. To render this effective, the iron must be brought to white incandescence, in order that the most intense heat may be applied to the gangrenous surface; otherwise the operation is useless. It must also be applied at an early period, if possible, at the commencement of the epidemic, in order to destroy the evil in the germ. If, however, the gangrene has become strongly developed, the whole surface of the wound must, previous to the cauterization, be laid bare, sinuosities and canals must be carefully divided, larger mortified parts must be removed by means of the scissors or the knife, the surface must be cleaned of all detritus, and dried by lint or sponges, so that the cautery may act upon a clean and dry surface. It must be applied especially to the edges of the ulcer, and beyond the diseased parts, in order to produce plastic reaction. Afterwards the patient must not remain in the room in which he was before; but he ought to be transferred either into the open air or in a

single room, where doors and windows are open by night and day; and the bed ought to stand as close as possible to the window, even during the night, and whether the season be rough or not. The elimination of the eschara ought to be left to Nature, and should not be promoted by warm fomentations or cataplasms, which relax the parts and thus favour relapses. The eschara will then come off a little later, but we have, on the other hand, the advantage of a stronger reaction, a better suppuration and formation of granulations. Gentle irritants should afterwards be applied to the surface of the ulcer.

The local applications ought to be accompanied with a suitable dietetic and pharmaceutical treatment. The strength of the patient must be kept up, and no mercury be given, the bowels being kept open by mild aperients. By strictly adhering to these rules, Professor Jüngken has for a number of years succeeded in keeping the surgical wards of the Charité Hospital, which were formerly a hot-bed of Hospital gangrene, free from this terrible scourge.

ITALY.

Rome, August 26.

THE WEATHER AND THE PUBLIC HEALTH.

I TO-DAY send you a short account of the meteorological observations which have been made here in the observatory of the Collegium Romanum from July 1 to August 15, that is the season of the greatest heat (a). These observations show that a gradual rise of the temperature took place from the commencement of July to the middle of August, at which time it began to fall again. The greatest heat was on the afternoon of August 15, when the thermometer rose to 98·2° F. in the shade; the lowest temperature was on the night of July 3 (58° F.). The medium temperature calculated from all the daily maxima and minima was 71·4° for the first half of July, 76·6° for the second half of July, and 79·7° for the first half of August. The medium temperature of the whole month of July was 74·4°. The variations of temperature in the course of the day, which are of importance in a climatological and sanitary point of view, became more considerable in proportion to the increase of heat; as the rise of the temperature was much slower during the night and the early part of the morning than it was later in the day. This is an important point, because several writers on fever, as it is in Rome (for instance, Santarelli and Falchi) have sought the causes of fever in the large variations of temperature during the day. The difference amounted to 21·6° in the commencement of July, and to 24·6° at the end of July and the commencement of August. The temperature of the night remained unusually high in two days out of 46 (the 6th and 7th of July), in which the difference amounted to 19·8° and 13·5° only; they were days on which the Scirocco (S. and S.W.) blew, and the usual change of the winds towards N. and N.E. did not take place.

During the whole of summer the wind rose regularly in the forenoon, blowing from the Mediterranean inland, in W. and S.W. direction, and in the afternoon reached a rapidity of from 2 to 15 miglie an hour. The evenings were calm, with W., and during the night the wind changed towards N., where the weathercock was found in the morning. The mornings were also calm. S. was rare, and unpleasant when it came. During the whole of summer the barometer gradually rose for about 29 millimètres; it was at 757·5 in the middle of August. The relative amount of moisture of the air was greatest in the evening, small in the morning, and smallest in the afternoon. The absolute amount of moisture steadily increased with the increase of heat. The sky was always serene from the beginning of July to the middle of August. There were only very slight fogs on five mornings and two evenings. Thin clouds (cirri and strato-cirri) were seen on four days, but they only occupied small portions of the firmament. A haze on the horizon was always remarked during the first half of August, the zenith being quite serene. No rain fell during the whole summer.

These observations are quite analogous to those made in previous years, and the course of summer is with us generally as follows:—June is moderately warm, and, therefore, one of the pleasantest months of the whole year; the temperature then ranges between 53·6° and 77° F., and occasional showers clear and refresh the air. The hot season begins with July. The harvest is then cut and thrashed in the open field. The vegetation on the wide Campagna is scorched up, excepting in the immediate neighbourhood of a few flowing or stagnant waters, and it is only on the top of the hills which surround the valley of the Tiber, and on the declivities of the Latine and Sabine mountains, that it continues at all green.

From these heights the Campagna is now to be seen, extending from the mountains far into the blue horizon of the Mediterranean, without a trace of green, and exsiccated to a deep red by the sun. After a while this red dress is exchanged for one of black, which is produced by the burning of stubble fields, an agricultural proceeding quite universal in this country, and at night the Campagna, therefore, affords the fine sight of numerous streams of fires dissecting the plain.

In the middle of July, generally about the 20th, when the sun enters the sign of the Lion, the heat becomes more oppressive, and at night the thermometer scarcely ever falls below 62·8 F. If at this time the Scirocco blows, which is never a great favourite with the Romans, and which, when it rises, generally lasts for two days, the complaints about the heat are universal, and form the standing theme of conversation. All such persons as have any misgivings about their health, now take refuge in the neighbouring mountains, the roads to which are crowded by carriages, packed high with furniture, and the railway-stations of Albano and Frascati, which are at other times remarkable for an utter deficiency of passengers, are now one scene of life and bustle. Others seek relief in the neighbouring seaside places, such as the pleasant little Porto d'Anzio, or the not very comfortable Civita-Vecchia. For those who cannot, or will not leave town, the newly established sea-baths of Palo afford a welcome and much-used recreation, as a couple of hours is sufficient for going there, taking a bath, walking a little on the pleasant beach, and returning by rail.

In the second half of July the heat continually rises, and reaches its maximum on or about the 15th of August. The maximum, which this year amounted to 98·2° F., was taken in the Observatory, which is a very elevated edifice, so that you may conclude that the temperature of the town reached a much higher point; indeed, it exceeded 100° F. in the shade, independently of the immediate heat of the rays of the sun, to which all such as do not remain in-doors all day, must at intervals be more or less exposed. It is true that just at the hottest season the horizon is generally hazy, but during the summer the sky has always been cloudless, the zenith a clear and deep blue; cirri and cirrostrati appeared very seldom, and then at a considerable height; the nights were also perfectly cloudless.

As the heat and the moisture of the air continues to increase, the secretion of the sudoriferous glands is proportionately augmented, and it no longer evaporates through the skin, but everyone is bathed in perspiration day and night, and many are covered with a red miliary eruption, which appears first on the neck and in the axilla, then proceeds to the nape of the neck, and at last covers the whole body. It is especially great on the delicate skin of infants. At this time, even places at an elevation of 600 or 1000 feet above the level of the sea, no longer afford protection against the plagues of summer, as even in the most frequented mountain refuges, the temperature rises to the same height as in the towns. Towards noon breezes from the sea arrive regularly, but these are so much heated on their passage across the burning plain of the Campagna, that they have lost all their freshness; neither does the evening afford much relief.

On the 20th of August the sun at last left the sign of the Lion, and about the 15th indications of an impending change set in. It often happens that the first shower or storm takes place just on the 15th, on the afternoon of the festival of the Madonna del Mezzo Agosto; the weather is then broken up and becomes more agreeable. The vapours now accumulate and are precipitated every afternoon in a violent and short storm, after which the sky remains clear until the next afternoon. The sufferings of summer are then over, and a delightful season follows, which restores elasticity to body and mind.

In the writings of the old Greek and Italian Physicians and

(a) The observatory is at a height of 154 feet above the level of the sea.

those of the school of Galenus, the summer is accused as the cause of many diseases, especially of the so-called essential fevers, the synocha simplex or ephemera, the synochus or eausus, several fevers of a putrid character, etc. These fevers have shrunk back under the light thrown upon Medicine by pathological anatomy, most of them having now been recognised as local affections accompanied by fever, which may in many instances be most accurately diagnosed by means of physical examination in the living man, and have to be brought under different heads in the system of pathology. Most of them are catarrhalic and hyperæmic conditions of the intestines and their appendages, or inflammations of different organs, viz. the meninges, the pleura, the lungs, etc., or typhoid fever with ulceration of the Peyerian plaques.

Setting aside the classification and theoretical explanations of the ancients who believed to recognise in each case a change of one of the four cardinal juices, the facts which have been left us by them, are worthy of great attention. Their theory that the heat of summer is the cause of many diseases, is quite correct, although too much influence may sometimes have been ascribed to it. During this summer, which was very dry and permanently hot, the state of the public health was as follows:—

Disturbances of the digestive functions were very frequent, I may even say general, as there was scarcely anyone who did not suffer from loss of appetite and diminished powers of digestion. The slightest fault in the diet was followed by dyspepsia, coated tongue, a sensation of heat in the abdomen, diarrhœa, vomiting, tenesmus, and mucous or bloody evacuations from the colon and rectum. These were sometimes accompanied with fever and sometimes not. The fever often came on with rigors, and lasted for several days, or returned several times at intervals. Such cases generally took a favourable turn; quiet, a careful diet, and an occasional purgative being sufficient for their cure. Other cases were accompanied with icterus, and there were a few cases of real gastric fever. Cases of this kind were frequent in the Military and Civil Hospitals, especially in the beginning of August. I am told that typhoid fever, which has not left us since the commencement of the Neapolitan war, was prevalent on the outskirts of the Roman territory towards Naples, but very few cases occurred in Rome itself. Intermittent fever, which is endemic with us, and boasts of the name of Roman fever, was of very modest pretensions this year. It was rather frequent in Spring, but it took a mild form; there were, however, a good many relapses in patients who had suffered from it last Autumn, and it sometimes combined with other diseases; a power of combination with all kinds of diseases being a characteristic feature of ague as it is in Rome. During the height of summer, when everyone suffered from the heat, there were scarcely any patients in the St. Spirito Hospital, where the harvestmen and agricultural labourers are brought when attacked by fever, and the Apothecaries dispensed very little quinine. Perhaps intermittent fever was so rare because not a drop of rain fell, and now that the great heat is over, it is confidently expected that we shall be spared any considerable inroads of ague this year.

As I have alluded to the essential fevers of the ancients, I may add that, during summer here, and in other more southern climates, cases of violent fever occur which have very simple symptoms; local affections, such as tumour of the spleen, etc., do not exist, or, at, least, they cannot be recognised; and it is, therefore, possible that these fevers are due to the immediate effect of heat on the crasis of the blood. This, however, is one of the most obscure chapters of pathology, and into which I will not at present enter.

In a sanitary point of view, the summer was on the whole favourable. The continual heat had, no doubt, a relaxing effect, and disturbed the digestion, but the number of patients was small, probably in consequence of the slow and gradual increase of the temperature. There was, however, an epidemic of dysenteria, amongst infants, of which I shall give you a short account in my next letter.

Chloroform *contra* Strychnine. — In the *New Orleans Medical Times*, for March, Dr. Schuppert reports a case of poisoning with strychnine, in which the symptoms were relieved by the inhalation of chloroform. He does not claim for the chloroform antidotal powers, but says, "under its free administration the contraction of the muscles ceased, and the organism gained time to eliminate the poison."

GENERAL CORRESPONDENCE.

MR. SYME ON SPASMODIC STRICTURE OF THE RECTUM.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your review of Mr. Syme's new book, you very properly point at the "Ego-egometism," which characterises it so strongly. Allow me to bring before your readers one of his claims to priority.

It is a prominent character of whatever Mr. Syme writes that he claims to be the author of nearly all the improvements of modern date which have been made in the practice of Surgery. His proceeding in this respect is illustrated by referring to the observations on "Spasmodic Stricture and Fissure of the Rectum,"—p. 64 *et seq.* After describing the improved method of operating in that disease, he says:—

"The credit of this improvement, although, so far as I know, not claimed by any other person, has been erroneously attributed to various sources of long posterior date to the time when I first taught and practised it. The following letter from Dr. Duncan, late Senior Ordinary Surgeon of the Royal Infirmary, who attended my clinical lectures in 1832, will, I trust, afford conclusive evidence of the priority in question."

Dr. Duncan says:—

"You then taught that it was unnecessary to divide the whole sphincter, that the incision should be very limited, and that in fact all that was necessary was to convert the fissure into a simple incision."

Then follows a letter from Dr. A——, of A——, respecting which Mr. Syme says:—

"The following case of a much-respected member of the Profession, will show that my practice continued to be the same at a later date, though still long before the period at which this mode of procedure has been supposed to have originated."

Respecting the operation he underwent, the writer of the letter states, "Of course I could not see what you did, but so far as I can recollect, you said that you only divided a little bit of the mucous membrane and the subjacent cellular tissue in the line of the fissure, so as to convert the fissure into a simple incision."

Both letters were written in the present year, and apparently at Mr. Syme's request.

From the testimony to his claims which he adduces in 1861, I shall turn to better evidence of his views and practice in 1832, and at a later period than any other that can be brought forward, for I shall turn to Mr. Syme's own words. In 1838, he published a work "On the Diseases of the Rectum," the sixth chapter of which is occupied with the disease now in question. The chapter is headed "Spasmodic Stricture of the Rectum," and here Mr. Syme shall speak for himself:—

"In the treatment of this spasmodic stricture, it has been found that the most effectual, if, indeed, not the only means of affording relief, consists in making an incision through the constricted parts. Boyer recommended this operation as essential to the cure of fissures at the verge of the anus, which he considered the cause of the contraction. And though his theory in this respect seems questionable, the advantage of the practice cannot be disputed. But the good effects of an incision are no less remarkable when there is merely contraction without fissure; and, therefore, in a practical point of view, it is of little consequence how the two affections are supposed to be connected. Boyer believed that it was necessary to cut through the whole thickness of the sphincter, and instructions for performing the operation to this extent have been given by many later writers. From my own experience, however, I am satisfied that it is not necessary to divide more than the external sphincter, or merely a portion of it, together with the lining membrane of the anus and subjacent cellular substance."—P. 167.

The first observation which this extract suggests is, that for any fissure not quite at or close to the outer surface the operation as described would have no beneficial effect. It would not reach disease embraced by the internal sphincter. But as regards the point which it is my object to clear up, it is obvious that in 1838 Mr. Syme held the opinion that the spasmodic stricture is not of secondary origin; that it is not dependent on the fissure: and, as to practice, that he thought the division of muscular fibres to be necessary for the cure of

fissure with contraction as well as for contraction without fissure; that, in short, "in a practical point of view, it is of little consequence how the two affections are supposed to be connected." And yet, as well in theory as in practice, this is the reverse of what he now claims to have originated in 1832. Nor is, it seems to me, the teaching of 1838 at variance with the statement of Dr. Duncan,—"You then taught that it was unnecessary to divide the whole sphincter," etc. It is a curious circumstance that the same words, "so as to convert the fissure into a simple incision," occur in the letter of Dr. A——, of A——, as well as that of Dr. Duncan.

But if Mr. Syme is not entitled to the priority in this matter, who is? My answer is, that before either of the dates referred to, the division of the mucous membrane only had been practised by Mr. Copeland, of London. That Surgeon did not, I believe, publish anything on the subject; but his practice is referred to by Sir Benjamin Brodie in Lectures which were published in one of the predecessors of your present Journal,(a) in 1834-35, and often previously delivered to his class. Mr. Quain, too, has given evidence to the same effect. In a Clinical Lecture, published in the *Medical Times*, July 24, 1852, these words occur:—

"A little more than twelve years ago, being about to perform Boyer's operation upon a female in this Hospital, the patient, who was lying in bed, and not held with sufficient firmness, having suddenly moved away, I drew the bistoury through the mucous membrane and integument only. It occurred to me at the moment to ascertain if that slight incision would be enough to relieve the patient. The success was complete; and from that period I have used no other operation in ordinary circumstances. At the time I thought that this method had originated with myself; but upon examining books, with a view to be assured upon this point, I found in a Lecture of Sir Benjamin Brodie's a remark which satisfied me that priority in this matter was due to another Surgeon." The credit is ascribed to Mr. Copeland.

No less remarkable than the claims he makes on his own behalf, is the levity with which Mr. Syme mentions the names of other Surgeons. In the previous extracts from his books it is said of Boyer, "He concluded that the former [the contraction] was probably the primary, and, at all events, the dominating, disease;" while, in another place, it is said of the same Surgeon, "Boyer, . . . believing that the excessive contraction of the sphincter depended upon the irritation of the ulcerated chops," etc. So an eminent Surgeon is made to say now one thing, and now the reverse, as it suits the varying opinion of the writer. Another instance may be added. At page 77, on the subject of "Internal Hæmorrhoids," it is said, "Sir A. Cooper, in his Lectures, relates various cases of death from hæmorrhage, caused by excision of the tumours, and speaks of tying them as hardly less free from danger; so that, with fear of bleeding on the one hand, and of inflammation on the other, both the scissors and the ligature were equally dreaded. My attention having been directed to the subject, I found," etc. Sir Astley Cooper's words, I need scarcely tell your readers, are here perverted, that they may the better judge how far they are perverted I will give an extract from the "Lectures":—"I have felt it my duty to state to you the consequences of performing the operation of excision for internal piles, in order to impress on your minds that it is safer to treat such cases by ligature than by excision. . . . It must not be concealed from you that even the application of a ligature has been known to destroy life. Mr. Cruikshank applied a ligature to an elderly gentleman from the country: the ligature produced gangrene, which extended beyond it into the rectum, and of this gangrene the patient died. Even this simple operation is not unattended with danger if the patient neglects himself."—P. 423.

Sir A. Cooper frankly mentioned that two of his cases had died after the operation by excision. He had not seen a fatal result from the ligature, but had heard of Mr. Cruikshank's case. Yet is he said to speak of tying hæmorrhoids as "hardly less free from danger" than excision. In fact, Mr. Syme seems to use other Surgeons in his writing in the same way that painters use shadows, or "darks," to bring into relief the prominent subject in the picture. To one writing with this intent accuracy is a matter of secondary consideration.

I am, &c.

LONDINENSIS.

(a) *Medical Gazette*, Vol. xv. 167.

ON SUDDEN AND FORCIBLE DILATATION OF STRICTURE OF THE URETHRA.

LETTER FROM DR. JAMES ARNOTT.

[To the Editor of the Medical Times and Gazette.]

SIR,—Mr. Holt's interesting paper in the last two numbers of your Journal furnishes another proof that Surgeons, dissatisfied with perineal section, are again anxiously enquiring for some safer substitute for the bougie, etc., in those cases of stricture which resist the common means of treatment. As evidence that forcible dilatation has often been very successful at the Westminster Hospital, nothing more could be desired than what Mr. Holt's communication contains; but as he has not entered into the history of this plan of treatment, nor alluded to the experience of others in its use, I will, with your permission, add a few remarks on these topics. I am desirous, likewise, of an opportunity to supply a deficiency in my paper on strictures inserted in the *Medical Times and Gazette* of the 14th of last month.

The treatment of stricture by forcible dilatation, or rupture, has been effected in two very different manners, which it is important to distinguish. One of these, and the first in use, was to burst or break down the stricture by forcibly pushing a sound or catheter against it. Sharp speaks favourably of it in his "Critical Enquiry," published a hundred years ago; but no one has carried out the principle of the method to such an extreme as M. Mayor, the celebrated Surgeon of Lausanne. Several of the operations which he performed in the Hospitals of Paris, showed very conclusively the uncertainty and danger of the proceeding. The urethra was pierced and the stricture was torn from its walls. Hæmorrhage and severe irritation were the natural results of such violence, and the stricture was aggravated instead of being relieved.

It is obvious that if the force of the dilating instrument were directed transversely, or from the centre of the stricture outwards, there would be no danger of thus tearing it away from the urethra or of making a false passage, and, accordingly, in the second plan of forcible dilatation or rupture, instruments acting in this transverse or ex-centric direction were substituted for those pushing forwards. In my "Treatise on Stricture" the principle of transverse dilatation was fully considered, and several modes of fulfilling it were suggested, particularly that of distending a strong silk tube placed within the stricture by a powerful syringe. When speaking of the treatment of stricture by rupture (page 172, second edition), it is stated that,—"In cases where the stricture is short and will not yield to gradual dilatation, if it be deemed proper to open the canal immediately, and there is yet room for a dilator to pass through the stricture, it may be ruptured without the fore-mentioned danger by distending it suddenly with a fluid dilator of powerful action." And, in a supplement to this Treatise, published a few years afterwards, the remark occurs that, "many strictures yield speedily to a gentle elastic continued pressure made by a fluid dilator; and to produce such was the common intention with which I at first employed the dilator; but for some time past, unless certain circumstances to be mentioned afterwards prescribe a contrary course, I have preferred making instantaneous and considerable dilatation of the stricture."

More than ten years after the publication of these works, M. Perrène, of Paris, again brought forward the subject of transverse and forcible dilatation. Instead, however, of effecting this in the manner which I had recommended, he substituted an instrument consisting of two steel rods which, when close together, have the appearance of a small steel sound, and which are separated when within the stricture by a tube pushed along a conducting wire between them. A reference to the engraving in Mr. Holt's paper will render intelligible this imperfect description of an instrument which, though it may be as well adapted for rupturing a stricture as the fluid dilator, is, from wanting the equality and elasticity of the other, less fitted for producing rapid distension without rupture.

When the Argenteuil Prize of 10,000 francs for the greatest improvement in the treatment of stricture was instituted in Paris in 1844, M. Perrène presented his plan of treatment, and was placed at the head of seventeen competitors. Unfortunately, however, for him, a dispute arose in the

Academy respecting the mode of awarding the prize, and before it was settled a change had come over the mind of the adjudicators. They had learned that his instrument was only a new mode of fulfilling a principle or indication which had been suggested and carried into effect by another, and that the success attending its use had not been so complete as had been represented. The commission appointed to witness its employment in the Hospitals, report that two of their colleagues, MM. Jobert and Berard, had themselves made application of M. Perrène's dilator in three cases with the most satisfactory results. In these obstinate urinary fistulæ had been treated by sudden dilatation of the stricture, followed by laceration; but, on the other hand, "M. Berard had operated with it on a patient at the Hôpital de la Pitie who died a few hours after one séance of forcible dilatation, and on whom was found an extensive rent or laceration of the stricture and the adjoining part of the canal."(a) M. Perrène's own opinion of the merits of the proceeding was, of course, very different from that of the judges appointed by the Academy. His eulogies even transcend those of Mr. Holt. "The patient," he tells us, "finds himself cured without having had, so to speak, time to perceive that he has been under treatment; and in rendering relapses impossible, this proceeding absolutely exceeds the great Surgical maxim, 'If it be a great matter to cure a disease *cito tuto et jucunde*, it is a much greater thing to cure it *cito tuto jucunde et æterno*."

Though naturally inclined to regard with favour a practice mainly introduced by myself, I cannot shut my eyes to its defects, which are more observable since the introduction of the plan of treatment by exactly limited incision, applicable to the most unyielding varieties of stricture, and the improvements in the construction of the fluid dilator, which have made its more gradual action in dilatable stricture more certain and efficient. Nevertheless, I have removed many obstinate strictures by sudden and forcible dilatation, without any permanent bad effect; and among the numerous varieties of this disease there may be some for which it would be still the best treatment. I have even, by means of a fluid dilator, ruptured an undilatable fibrous stricture of the rectum without producing much irritation. When, however, an obstinate urethral stricture occupies a considerable portion of the canal, incision is safer than rupture, provided it be made in the manner which I have explained in my paper of September 14. It must be exactly limited to the stricture by a knife, so controlled by mechanism as to cut only under considerable pressure, and when this pressure is exclusively made on the stricture. Instead of increasing the irritation, that already existing will be removed by such an incision; and if the channel through the stricture will admit of the entrance of a broad knife with a narrow handle, the incision may easily be made of sufficient depth.

I am, &c. JAMES ARNOTT.

6, York-street, Portman-square, October 26.

BILE IN THE FÆCES.

LETTER FROM MR. WIGLESWORTH.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the *Medico-Chirurgical Review* for October, 1861, in the critique on Dr. Day's "Physiological and Medical Chemistry," the following passage occurs:—"Tell the Practitioner a thousand times that the green colour of the fæces is due, not to biliary colouring matter, but to subsulphide of mercury, he will nevertheless give mercury, and believe it a cholagogue. Tell him ten thousand times that no *bile* has ever been found in human fæces, and not enough of the products of decomposition of bile to make an analysis, he will nevertheless *see* large quantities of bile in the dejections after the use of blue pill and other mercurials, and deceive himself and others by the effete dogma of "biliousness" and its "treatment."

Dr. Carpenter, in his elaborate work on Human Physiology, says, when speaking of the composition of the fæces:—"The microscope enables us to recognise the brown colouring matter of the bile," and "its colouring and its fatty matter are undoubtedly present." And again: "The indications of the presence of bile are more distinct when the fæces have remained for only a short time in the large intestine, and when there has consequently been less time for its re-absorption. In the fæcal discharges which result from the action of mercurials, large quantities of biliary matter may be detected, very little changed."

In the translation of Frerichs' work on Diseases of the Liver, published by the New Sydenham Society, at page 111, I find:—"Of greater importance, in a practical sense, are the changes in colour which the fæces exhibit in jaundice, because from their character we can more easily draw a conclusion as to the more or less complete exclusion of bile from the intestines."

And in Dr. Copland's "Medical Dictionary," we are informed that in jaundice "the stools are hard, ash-coloured, clayey, or whitish, indicating an absence of bile." And further on, "In a case which I lately attended, the jaundice rapidly disappeared after the discharge of a blackish inspissated bile." Do all these eminent authorities also labour under an *effete dogma?* Is there no connexion between the clay-coloured stools and the absence of bile from the intestinal canal? How is it that the motions are frequently passed green in colour, when no mercury whatever has been given, and to what is the colour then due? How is it that mercury is frequently administered persistently when the motions are clay-coloured from disease of the liver, and that they resume their healthy tinge without even becoming green? and again, from the action of mercury we frequently get not only green, but natural and dark-coloured fæces. Is it only under peculiar circumstances that the mercury is converted into the "subsulphide," and what are those conditions?

If any of your readers could enlighten me upon the above points, I should esteem it a great favour, for until then, I must give in my adherence to the *effete dogma*.

I am, &c. ARTHUR WIGLESWORTH.

West Derby-road, Liverpool, October 24.

(a) "Rapport sur le Prix Argenteuil," *Bulletin de l'Academie de Médecine*, September, 1853.

REPORTS OF SOCIETIES.

JUNIOR MEDICAL SOCIETY OF LONDON.

THURSDAY, OCTOBER 24.

MR. FAGGE, Guy's, in the Chair.

A PAPER, by Mr. WEAVER, of Guy's, was read, upon

JAUNDICE.

Cases of jaundice, he said, are divided by Frerichs into those of obstruction in the biliary passages and those where there is no discoverable obstruction. The former class include cases where there is constriction of the common bile duct, closure of the common bile or hepatic duct, constriction of the liver, or closure of the ducts within the liver itself. Constriction of the common duct occurs in jaundice from catarrh, from pressure, as of the gravid uterus, or impacted fæces in the colon; from glands in the liver fissure enlarged by lardaceous, tubercular, or cancerous infiltration, and from gall stones. A case of lardaceous liver and jaundice was well exemplified in a girl, aged 18. The liver had been enlarged for seven years, jaundice had existed for one year. As an instance of gall-stones, the Author cited the case of a woman who had previously suffered from calculus in the kidney and hæmaturia. The jaundice was too intense to be the result of renal irritation. She suffered paroxysms of agonising pain. Improvement in four weeks. The effects of obstruction in the biliary ducts were considered. The bile, unable to find exit into the duodenum, is re-absorbed. The liver cells are still performing their function, as bile does not pre-exist in the blood. The epithelium of organs and the epidermis are the agents for the excretion of bile-pigment in jaundice. Absence of bile from the intestines induces the paleness and fetor of the fæces, and also constipation. Long-continued obstruction produces dilatation of the ducts of the gall bladder, and for a time enlargement of the liver. The correctness of the statement that in these cases

the liver cells disappear, leaving only granules, is denied by Dr. Wilks. Ulceration, abscess, and peritonitis may arise. For instance, a woman, aged 50, had symptoms of gall-stones, then jaundice with pyrexia, rapid enlargement of the liver, and death. On post-mortem examination, the liver was found riddled with abscesses, ducts greatly enlarged, and small gall-stones were impacted in the common duct. The main duct may be closed by various causes, as cancer of the pylorus, duodenum, or pancreas. The ducts within the liver itself may be closed by cancer, hydatids, or inflammatory deposit, by a mass of dead membrane passing down the hepatic and common ducts, by cirrhosis, and by congestion of the liver, the minute ducts being obstructed by distended blood-vessels. The Author recorded cases of most of these forms of obstruction. Passing on to the cases where no obstruction is discoverable, we have the effects of mental emotion, pyæmia, fevers, etc. Case.—Jaundice from pyæmia supervening upon ulceration of the rectum. The liver was found green, studded with white spots from pus. A case of pyæmic jaundice from syphilitic caries of the frontal bone was cited. Of acute yellow atrophy of the liver, in which there were most severe symptoms and acute jaundice, there are three preparations, the Author said, in the Guy's Museum; the livers weighed respectively 2 lbs. 2 ozs., 1 lb. 3 ozs., and 1 lb. 9 ozs. Frerichs' theory of these cases is, that the acids of the bile get changed in the blood into bile pigment.

An animated discussion ensued, in which the following members took part:—Messrs. Galton, Clarke, Yeo, Sydney-Turner, Hindle, Meadows, Pye-Smith, Best, Hilles, and Stevenson.

Mr. Morton (St. Thomas's) exhibited a specimen of Bronzed-Skin in Connexion with Supra-Renal Capsule Disease.

Mr. Trewhella (Guy's) exhibited a specimen of Ulceration of the Fauces after Scarlet Fever, and also a Portion of Lung of the same patient, showing the three stages of pneumonia.

Mr. Weaver having replied, a vote of thanks was unanimously returned to him for his interesting paper.

The next meeting of the Society will be held at the London Hospital on November 21.

MEDICAL NEWS.

Apothecaries' Hall. — Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, October 24:—

Belcher, Joseph Silverthorne, Charing-cross Hospital
Leech, Daniel John, Manchester
Lewis, William Hunter, Rawmarsh, near Rotherham.

The following gentleman also on the same day passed his First Examination:—

Roberts, Frederick John, Manchester.

APPOINTMENTS.

Barton.—Henry Thomas Barton, M.R.C.S. Eng., has been elected Medical Officer for the Stalmine District of the Garstang Union, Lancashire, *vice* Mr. Powell, resigned.

Colledge.—Thomas Richardson Colledge, M.D. King's Coll. Aberdeen, F.R.C.P. Edin, F.R.C.S. Eng., has been appointed Consulting Surgeon to the Ophthalmic Hospital at Gloucester.

Croker.—Edward Croker, L.R.C.S. Edin., has been appointed Medical Officer to the Ballynoe District Dispensary, in the Fermoy Union, County Cork.

Howell.—Horace Sydney Howell, M.R.C.S. Eng., L.S.A. Lond., has been appointed Resident Surgeon to the Kent County Ophthalmic Hospital, Maidstone.

Hughes.—James Stanus Hughes, M.D. Glasg, F.R.C.S. Irel., L.M. Dublin Lying-in Hospital, has been appointed to the Professorship of Surgery at the Ledwich School of Medicine, Dublin.

Jessop.—Walter Jessop, M.R.C.S. Eng., has been appointed Surgeon to the Ophthalmic Hospital at Gloucester.

Low.—William Cook Low, M.D. Univ. Edin., L.R.C.S. Edin., has been appointed Medical Officer for the Fifth District of Martley Union, Worcestershire.

MacSwiney.—Stephen Miles MacSwiney, M.D. St. And., L.K.Q.C.P. Irel., M.R.C.S. Eng., Professor of Forensic Medicine in the Catholic University Medical School, Dublin, has been elected Physician to the Jervis street Hospital, Dublin.

Prentice.—Edward Prentice, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer for the North Walsham (South) District, in the Erpingham Union, Norfolk.

Roberts.—David Roberts, M.D. Glasg., L.R.C.P. Edin., L.F.P.S. Glasg., M.R.C.S. Eng., and L.M., L.S.A. Lond., has been elected Medical Officer to the Licensed Victuallers' School.

Shepheard.—John Shepheard, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer for the North Walsham (North) District, in the Erpingham Union, Norfolk.

DEATHS.

Cameron.—October 21, at Southampton, John McLeod Cameron, M.B. Mar. Coll. Aberd., L.R.C.S. Edin., Staff-Assistant Surgeon 5th Dépôt Battalion, late of H.M. 27th Regiment, aged 28.

Coleby.—Recently, John Coleby, of North Walsham, M.R.C.S. Eng., L.S.A. Lond.

Dow.—October 24, James Kidd Dow, of De Beauvoir Town, L.R.C.P. Edin., L.S.A. Lond.

Hancorn.—October 30, James Richard Hancorn, M.D., at 22, White Lion-street, Spital-square, London, aged 53.

Hickman.—October 25, George Hickman, of Great Marlow, Bucks, M.R.C.S. Eng., for many years Assistant-Surgeon to the Royal Horse Guards Blue, aged 75.

Morgan.—October 26, George Advent Morgan, of Alpha-road, Regent's-park, formerly of Harbury, Warwickshire, M.R.C.S. Eng., aged 61.

Plant.—October 21, George Plant, of Blackpool, Lancashire.

Sedgwick.—October 27, Samuel Sedgwick, of Brompton Crescent, formerly of Antigua, West Indies, M.D. Edin., M.R.C.S. Eng., aged 64.

Watkins.—August 20, from apoplexy, produced by heat and exposure while on the journey from Dera Ismael Khan to Jhung, John Watkins, Assistant-Surgeon Bengal Army, aged 33.

Williams.—October 22, John Scott Hunter Williams, of Macclesfield, Cheshire, M.R.C.S. Eng., aged 40.

It is said that a site has been chosen for the new Memorial Hospital to Lord Herbert of Lea, within 300 yards of the new Greenwich and Deptford Cemetery, so that tombs, hearses, and funerals will be constantly under the eyes of the inmates.

An *émeute* has occurred amongst the gentlemen cadets of the Royal Military Academy at Woolwich, caused by discontent at the quantity and quality of the provisions. We have long ago heard that there was good ground for these complaints, although no one dared come forward to make them.

Emigration from Ireland.—The total number of emigrants during the first seven months of 1860, was 55,782, and in 1861, 45,508, being a decrease of 10,274 in the seven months terminating on July 31 last.

Distilled Water of Copaiba.—We hear that this distilled water contains all the copaiba that is actually taken and passed off by the urine when copaiba is administered internally. The water may be taken in ounce doses, or may be used as a vehicle for substances used for injection in gonorrhœa. It has but little of the usual flavour of copaiba, and is not offensive.

A Child Born Covered with Sulphur. — In the *St. Louis Medical and Surgical Journal*, for March, Dr. A. A. Rucker reports a case of a child born covered with an unguent of sulphur. Sulphur was manifest between the fingers and toes in a pure state, and Dr. Rucker thinks the previous administration of sulphur to the mother accounts for all the symptoms. She had been using the sulphur internally, in nearly teaspoonful doses, for several weeks anterior to confinement. This was certainly a novel method of manufacturing sulphur ointment, besides being the only case on record where itch ointment was applied to a child in utero.

Silver Suture of Fractured Patella. — Professor Cooper, of San Francisco, writes:—"Our method of treating transverse fractures of the patella, and one which has, thus far, been invariably successful, is as follows:—Make a longitudinal incision, of sufficient length to expose the fragments; drill the anterior margins of them with a drill, one line in diameter; then pass a silver ligature through the holes thus made, and, by crossing the ends and pulling stoutly upon them, bring the separated parts together. A knot is then made by twisting the ends of the ligatures together, which holds the fractured portions of the patella in apposition, by which a bony union always takes place." As essential to success, Professor Cooper insists that the wound be healed by granulation, and not by first intention. To this end, lint should be placed in the wound, and the limb tightly bandaged from the toes to the middle of the thigh. The dressing he would advise to be changed only once a week.

At the end of the third week, he would omit the lint, but continue the bandage. The wires should be removed at the end of six or eight weeks. He concludes by saying, "After the operation of applying metallic ligatures in this way, the patient scarcely ever suffers to any considerable extent, and generally remains entirely free from pain during the whole course of treatment; but, in order to have it so, the keeping of the wound open and the application of the tight roller are indispensable."

The Action of Chloroform on the Blood.—In the Boston *Medical and Surgical Journal* for March, Dr. C. T. Jackson says, "Chloroform consists of one equivalent of formyle and three of oxygen. When chloroform is inhaled into the lungs, the oxygen is abstracted from the blood and, combining with the formyle, makes formic acid, while chlorine combines with the blood as a substitute for oxygen. Thus a portion of the blood becomes chemically changed, disorganised, and rendered unfit for its vital functions." He further says, "I have now a phial of this blood (blood taken from a young lady killed by the inhalation of pure chloroform) before me, it having been kept in my office, exposed to temperatures from the freezing point to above 80° for more than six years, and yet it has not decomposed, nor has a single blood-globule settled to the bottom of the phial, nor has the colour changed in the least."

Ancient City of the Picts.—Professor Simpson, with a view of writing a history of ancient Camelon, was out in Falkirk on Saturday, with six other gentlemen, collecting information and making researches for additional proofs to establish the site beyond the possibility of conjecture. Through the assistance of Mr. Starke, a farmer, a portion of whose farm covers the supposed site of the ancient city, and whose knowledge of the historic partieulars in question is a valuable acquisition to intending historians, the situation of a common sewer was pointed out. Six labourers were set to work, and it was discovered in a short time, and found to measure four feet in depth, and twenty inches in width. A silver coin, about the size of a fourpenny piece, but considerably thicker, was found. Pieces of pottery, glass, and iron were also found, which no doubt will throw additional light on this interesting subject.

Popliteal Aneurism Cured by Digital Compression.—In the *Philadelphia Medical and Surgical Reporter* for October, G. C. Blackman reports a case of popliteal aneurism cured by digital compression. Pressure was made at the groin, and was continued only three hours, when the pulsation entirely ceased, and did not return. On a former occasion the same journal referred to a case of cure of inguinal aneurism by digital compression, under the direction of Professor W. C. Nichols, of New Orleans. In that case pressure was obliged to be continued for thirty hours. M. Bouvier has reeently reported two cases cured in the same manner—one of the brachial artery, and the other of the temporal. In the first case, pressure was continued for thirty-one hours, and in the last eighty-five. In this last case, however, pressure was intermitted during the night.

Medical Students in the Prussian Universities in the Winter Session 1860-61.—The number amounted to 825, viz., 721 Prussians and 104 foreigners. The 825 were distributed over the different Universities as follows:—Greisswald, 136; Halle, 53; Breslau, 114; Königsberg, 102; Berlin, 311 (240 Prussians and 71 foreigners); Bonn, 109.

Mortality among Infants in France.—At a reeent sitting of the Academy of Sciences, Dr. Bouchut presented a statistical account of the mortality of children within a period of 20 years—viz., from 1839 to 1859, taken from the registration of the Administration of Public Assistance. One his of tables comprises 48,525 children deposited at the Foundling Hospital; another table comprises 24,169 children sent to nurse by the Administration. The principal results at which our author arrives are as follows:—1. Mortality among children in France amounts to one-sixth during the first year of life, while formerly it was one-fourth. 2. Within the same period the mortality among males, taken alone, is one-fifth; among females, one-sixth. 3. Mortality is greater among the children of the poor than among those of the rich. 4. Cold weather increases the mortality of newly born infants; and in winter children cannot without danger be taken either to the mairie or the church. 5. Among foundlings the mortality is 11 per cent. during the first ten days of life, and 55 per cent. within the first year. 6. Dry-nursing, or bringing up by hand, greatly increases the chances of death among foundlings. 7. The mortality among children of the middle classes sent out to nurse is 29 per cent. within the first year. 8. Within that period mortality is greater in the 13 departments which lie around Paris than in any other department in Franee, and this is probably owing to the greater number of foundlings they contain, to the want of necessary care by the nurses who receive the children, and to the influence of the endemical or epidemical disorders that prevail in the capital.

The Washing Establishment at the Salpetriere.—This, perhaps the largest establishment of the kind in existence, washing the linen of several Hospices, is yet about to be so increased as to effect the washing of the whole of the charitable establishments in Paris. Last year 3,000,550 articles were washed in it, and, owing to the employment of artificial drying-machines, linen brought in the morning may be taken away on the evening of the same day. Admirable as these drying-machines are, the heat produced by them is found to produce mischievous effects upon the women employed; but a new plan recently tried with success at the Salpêtrière will obviate this inconvenience. This consists in introducing the linen within heated cavities made in the walls, and capable of being closed, so as to prevent injury to those in attendance.

The distinguished Military Surgeon, Gaspard Leonard Scrive, Chief Inspector of the French Army, has just died at Val-de-Grâce, at the early age of 46. Surgeon in Chief during the Crimean War (of which campaign he has left an interesting surgical relation), he manifested during its trying course great administrative powers, exhibiting an equal knowledge of the practical duties of his Profession and of mankind. The services he rendered during this bloody war, aggravated by epidemics of typhoid and cholera, obtained for him the high post of Inspector. Uniting great firmness with a strong love of justice, possessing great dexterity in the performance of surgical operations, and ever fertile in resources in emergencies, Scrive might well be regarded as the type of a Military Surgeon. He was of commanding stature, and the recipient of many Orders, among which was that of the Bath.

Rival Druggists in France not Allowed to Assume the Same Names.—The Tribunal of Commerce of Marseilles has just delivered a sentence which has certainly justice for its basis, though its operation at first sight may seem somewhat arbitrary. It establishes it as the duty of the last arrived of two rivals to take means that his establishment should not be confounded with the one he seeks to oppose. A druggist, Gustave Laurens, had been established for several years at Marseilles, when a cousin, by name Paul Gustave Laurens, set up a rival establishment in an adjoining street, dropping the name Paul, and calling himself Gustave Laurens like the other, under the plea that this was really his name. The tribunal, however, has insisted that he should make known to the public that he is not the real Simon Pure, and for this purpose even the addition of the dropped Paul is not considered enough. He is commanded, within ten days, to affix over his shop, to his labels, etc., the word "cousin" in addition to his surname, suppressing the Christian name Gustave, to advertise the decree in four newspapers of the town, and to pay all the expenses of the action.

Sub-periosteal Sections.—At the last sitting of the Academy of Sciences, Dr. Maisonneuve communicated six new cases of the sub-periostic section of bones. The first was that of a young woman of twenty-two, attacked with mortification of the diaphysis of the tibia. The piece of bone extracted was twenty-eight centimètres (nearly a foot) in length; the periosteum was preserved. The operation was effected on the 3rd of July last, and the 15th of September the patient left the Hospital with her leg as strong as before. The second case was that of a girl of sixteen, who, for the last eighteen months had been suffering from a caries of the fifth metacarpian, and who, on the advice of the schoolmaster of her village, had come to Paris, from the Department of the Ardennes, to have a new bone put in (such was her own expression). The diseased bone was extirpated, the periosteum being preserved as usual, and after twenty-eight days the

patient went away perfectly cured, the bone having been completely reproduced within that short period. The other cases were of the same nature as the preceding ones. Dr. Demarquay also read a paper on the same subject. One of his cases was that of a young man of eighteen, who had a part of the humerus mortified, which had to be extracted by penetrating through the periosteum and a layer of newly-formed bone. The other case was more remarkable still, considering the depth of flesh to be traversed in order to reach the thigh bone. Dr. Demarquay succeeded in making an incision twenty centimètres in length, penetrating through a layer of newly formed bone, and extracting a piece of mortified bone eleven centimètres in length. The patient was presented to the Academy in a perfect state of recovery, only for the present walking with a stick; before, his leg was bent backwards on the thigh, but it has since stretched out again to its natural position.

STATE OF THE PUBLIC HEALTH IN JULY, AUGUST, AND SEPTEMBER, 1861.—"The number of deaths registered in the three months was 100,986, considerably more than in the same quarter of 1860, which was 86,423, but less than in that of 1859. And over England the fluctuation in deaths was generally similar to that which is shown in the aggregate number. The annual rate of mortality did not rise quite to the average; for the former was 199 in 10,000 of the population, the latter is 202. In the cold September quarter of 1860 the rate was 171. The mortality in the country and small towns was 178, whereas that of the large towns was 221. The respective average rates are 176 and 235. Whence it appears that in an equal number of the population (10,000) there were 43 deaths more in towns than in country; but the health of the former was better last quarter, relatively to their own former experience, than that of the latter, for the mortality among the rural population slightly exceeded its average. The town and country rates of mortality in the summer of 1860 were respectively 184 and 159. That season differed from the summer which has just passed chiefly in this respect, that it was much colder, and consequently diarrhœa prevailed much less than it has recently done. In 10,000 persons the excess of deaths this year over those of 1860, was 37 in towns, and 19 in the country. Other causes besides diarrhœa affect in various ways the results; but the facts are sufficient to show that this complaint rules with a more deadly effect in towns, 'where houses thick and sewers annoy the air.' It deserves to be noticed that the annual deaths from diarrhœa in London ranged from 452 to 841 in the years 1840-5; they suddenly mounted to 2152 in 1846; they continued high during the whole period 1847-59, which embraced two cholera epidemics; they were 3335 in 1859, which is more than a sixth part of the deaths from diarrhœa that year in England. They fell to 1383 in 1860. When an efficient system of drainage has come into operation in London and the large towns, and other sanitary works have sweetened the air above and the earth beneath, the permanent reduction of diarrhœa will be, it may be hoped, among the good results that will be gained; but that improvement 'at home,' which is so much needed by the poor, increased comfort in their dwellings and order in their habits, better food and purer drink, will probably be still more effectual in abating that disease by which so much infant life is yearly destroyed."—*Registrar General.*

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—A half-yearly general meeting of this Society was held on October 23, T. A. Stone, Esq., President, in the chair. It appeared from the minutes read, that applications have already been made by forty-three widows and twenty-six orphans, for grants for relief for the ensuing half-year commencing in November next, the amount of which reaches to over £950, an increasing amount which can only be provided by a perseverance in the custom of continually increasing the capital stock of the Society. The limits, from within which alone can members of the Society be elected, were enlarged from the whole of Middlesex, and seven miles from the General Post-office in Surrey, Kent, and Essex, into Middlesex as formerly, and the limits of the London district post in other directions; an enlargement which will take in a large number of Practitioners now excluded from the advantages of the Society. Also all registered Practitioners were made eligible for election as members. Also the age at which the orphans shall cease to receive half-yearly grants was extended from fourteen, the age at which apprenticeships used to be entered upon, to fifteen years of age, with the power of receiving a grant towards "self-maintenance," till the age of sixteen. We consider it necessary to remind our readers that the families of members only can share in the privileges of the Society, and that members are elected at the four quarterly courts of the Directors, notices of which are always given in the weekly Medical journals by advertisement. An election of Officers and Directors for the ensuing year also took place. The following is a list of Officers and Directors; those names to which an asterisk is affixed are new elections:—*President*—Thomas Arthur Stone, Esq. *Vice-Presidents*—Martin Ware, Esq.; Everard A. Brande, Esq.; John Nussey, Esq.; Sir B. C. Brodie, Bart., F.R.S.; Peter M. Latham, M.D.; John Bacot, Esq.; Thomas Turner, M.D.; D. Henry Walne, Esq.; A. J. Sutherland, M.D., F.R.S.; Edward Tegart, Esq.; Edward Stanley, Esq., F.R.S.; George Burrows, M.D., F.R.S. *Treasurers*—John Miles, Esq.; James T. Ware, Esq.; G. Hamilton Roe, M.D. (Atg.) *Directors*—A. B. Barnes, Esq.; Edward Dew, M.D.; John Love, Esq.; H. A. Pitman, M.D.; Charles Collambell, Esq.; Benjamin Travers, Esq.; B. G. Babington, M.D.; J. Wetherfield, Esq.; John J. Sawyer, Esq.; Thomas Brown, Esq.; C. J. B. Aldis, M.D.; William Dickinson, Esq.; J. C. Salisbury, Esq.; Henry Blenkarne, Esq.; T. King Chambers, M.D.; John Clarke, M.D.; Daniel Scannell, Esq.; Prescott G. Hewett, Esq.; Sir John W. Fisher*; W. J. Little*, M.D.; J. Gregory Forbes*, Esq.; William Munk*, M.D.; Barnard W. Holt*, Esq.; Charles Miles*, Esq.

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VITAL STATISTICS OF LONDON.

Week ending Saturday, October 26, 1861.

BIRTHS.

Births of Boys, 945; Girls, 877; Total, 1822.

Average of 10 corresponding weeks, 1851-60, 1653·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	579	508	1087
Average of the ten years 1851-60	545·0	510 6	1055·6
Average corrected to increased population..	..	..	..
Deaths of people above 90	1	..	1
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa
West	463,373	..	4	21	1	4	7	9
North ..	618,201	..	1	17	6	5	11	7
Central ..	378,058	2	2	14	1	5	7	6
East	571,129	3	1	19	1	7	15	5
South ..	773,160	..	2	25	2	10	12	8
Total.. ..	2,803,921	5	10	96	11	31	52	35

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·826 in.
Mean temperature	54·1
Highest point of thermometer	64·2
Lowest point of thermometer	43·4
Mean dew-point temperature	51·5
General direction of wind	Variable.
Whole amount of rain in the week	0·21 in.

BOOKS RECEIVED.

The Alps. By H. Berlepsch. London: 1861.

Elements of Natural Philosophy. By Jabez Hogg, F.L.S. London: 1861.

Forest Creatures. By Charles Bower. London: 1861.

The Diseases of India. By W. J. Moore. London: 1861.

Diseases of the Skin. By T. Hunt. Fifth Edition. London: 1861.

On Inflammation of the Uterus. By J. H. Bennet, M.D. Fourth Edition. London: 1861.

Medical Topography of Bhooj. By W. J. Moore, M.D. Calcutta: 1861.

Intestinal Obstruction. By John Gay, F.R.C.S. London: 1861.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Cox's case shall appear next week.

Dr. Carson's note shall be attended to.

Mr. Adams's notice of Operations at the Westminster Hospital did not arrive until after the publication of our last number. Such notices should reach the office *at latest* on the Thursday morning before publication.

A. H.—The rule is "that the time of commencing Professional Studies shall be understood to be the time of commencing studies at a Medical School."

Rusticus.—M. Chevreul first developes mushrooms by sowing spores on a pane of glass covered with wet sand; then he selects the most vigorous individuals from among them, and sows their mycelium in a cellar, in damp gardener's mould, covered with a layer of sand and gravel two inches thick, and another layer of brick rubbish about an inch deep. The bed thus prepared is watered with a diluted solution of thirty grains of nitrate of potash per square mètre, and in about six days the mushrooms grow to an enormous size.

An Edinburgh Student cannot do better than read Mr. Simon's Report on Vaccination, and Dr. Husband's very useful little book, "On a New Method of Preserving Vaccine Lymph."

Mr. W. B. Shields.—The Profession would be deprived of many an acute case and many a tedious one if the country Druggists were to cease prescribing. The thing is nearly as broad as it is long, but on the whole we do not lose much. Some Druggists' shops are a kind of nursery of inveterate diseases. On the other hand, the really conscientious Druggist, who advises his customers to apply to a Medical man for Medical advice, should be encouraged fairly.

State Vaccination.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I shall feel obliged if you will allow me to correct an error in the notice of my paper on "Vaccination" in your Liverpool correspondent's letter of October 22. He represents me to have expressed "regret that the Medical Council had not been able to see their way to undertake the regulation of national vaccination instead of leaving it to a non-Medical body, the Privy Council." What I really did say was that the Privy Council took no steps in the matter until after the Medical Council had declined to do so; and so far from regretting it has fallen into the hands of the former, I am inclined to think that Mr. Simon and his colleagues who constitute the Board of Health under the direction of the Privy Council, are more likely to carry out the object successfully than could be expected of the Medical Council, who only assemble for a few days in each year, are then fully occupied with other matters, and again disperse to their ordinary professional pursuits.

In all other respects, except depriving my patronymic of the final "e," your correspondent's report is substantially correct. I am, &c.

Liverpool, October 28. A. B. Steele.

The "Ossified Man."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Are there two "Ossified Men"? The extract quoted by "J. D." relates to a man who died in the Parish of Bride, Isle of Man; and whose skeleton is "in the possession of Dr. McCartney, in Dublin." The extract quoted by Mr. Crosse of Norwich, relates to a man whose skeleton is now in the Museum of Trinity College Dublin, but who was a native of the county of Cork, and died about twenty miles from the city of Cork. A curious case of the kind above mentioned was under the care of Mr. Gore, at the Bath United Hospital in 1857, the notes of which were given to me, and I have endeavoured to collect notices of similar or analogous cases with a view to the publication of the whole, and should therefore be glad of any references bearing on the subject. I am, &c.

Bath, October 28. R. Wilbraham Falconer, M.D.

Lead Poisoning by Snuff.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg to refer Dr. Cregeen for published cases of slow poisoning, from the adulteration of snuff—with red lead—to two very interesting cases, one by Mr. Eriehsen, page 617; another reported by Mr. Fosbroke, of Bideford, page 619: of Dr. Hassall's book on "Food and its Adulterations." In the *Medical Times and Gazette*, No. xxxii. page 138, a fatal case is recorded, and also a case is contained in the *Annales d'Hygiène*, 1831, vol. ii., page 197. I am, &c.

Mansfield, October 28. Henry Crutchley, L.R.C.P. Lond., &c.

Independent Liability of the Fœtus to Disease.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having read Mr. Cook's communication in your number of October 19, I am induced to report that some time since I delivered a woman of a female infant, having a well-developed eruption of varicella, the mother being perfectly free therefrom. She stated that a few days previous to her confinement she had been in the company of a child suffering from chicken-pox, and thus accounted for her babe being so affected; it died on the ninth day after birth. I am, &c.

Birkenhead, October 25. M. Jennett.

COMMUNICATIONS have been received from:—

Dr. Ramsbotham; Dr. Chambers; Dr. McWilliam; Dr. R. Lee; Dr. Grailly Hewitt; Dr. Falconer, Bath; Dr. Gray, Oxford; Dr. Crutchley; Dr. Osborn, Southampton; Dr. Carson, Coleraine; Dr. Palfrey; Mr. Steele, Liverpool; Mr. Clay, Birmingham; Mr. Freeman; Registrar-General; Mr. W. J. Cox; Mr. Marson; Mr. Wilkie; Mr. Donnelly; Mr. Plumptree.

APPOINTMENTS FOR THE WEEK.

November 2. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.

4. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Epidemiological Society, 8 p.m. Introductory Address by the President. H. Miles, Esq., R.A., "On an Indian Remedy for Small-pox."

Medical Society of London, 8½ p.m. General Meeting. Thomas Bryant, Esq., "Remarks on Vesico-Vaginal Fistula, and Ruptured Perineum, with the Introduction of Improved Means for Operating."

5. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

6. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Obstetrical Society of London, 8 p.m. Dr. Marion Sims "On Vaginismus." Dr. Tilbury Fox "On Puerperal Fever."

7. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

Harveian Society of London, 8 p.m. Mr. Harry Lobb "On Puerperal Paralysis."

8. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday next:—

By Mr. Fergusson—Removal of Fatty Tumour from Back; for Cleft Palate; Amputation at Knee-joint; for Fistulous Opening in Male Urethra; Cauterization of Knee-joint.

ORIGINAL LECTURES.

CLINICAL LECTURES

DELIVERED AT

ST. THOMAS'S HOSPITAL IN 1861.

By F. LE GROS CLARK, F.R.C.S.
Surgeon to the Hospital.

Lecture XI.

INJURIES TO THE HEAD AND ABDOMEN, LITHOTOMY IN THE MALE AND FEMALE.

Gentlemen,—Two cases have been admitted during the past week, which, though essentially different in their nature, illustrate principles of prognosis as well as diagnosis, which are of great importance to you in practice, and therefore I will begin this Lecture by a few comments on them.

J. T., aged fifty, a livery-stable keeper, was admitted on October 9, at nine o'clock in the evening. He had been thrown from a gig, and had fallen on the right side of his head; his companion, who gave this account, and asserts that neither of them was intoxicated, escaped uninjured. On admission the patient was partially unconscious; his pupils were contracted and inactive, pulse slow and feeble, breathing slow, and skin cold. There was a trifling contusion on the right side of the head but no bleeding from the ears, warmth was applied to the surface; mustard plaisters to the feet, and cold lotion to the head. As his companion admitted he had taken some spirits, it was supposed by the House-Surgeon that his condition might be partly due to intoxication. On the following morning the pulse had risen in number and volume; the skin was warm, and he had vomited. He answered questions rationally, and complained of most pain at the back of the neck. A purgative was ordered and acted in the course of the day.

On the second day it was more difficult to rouse him; the pupils were dilated, especially that on the side opposite to the injury, and there was some hemiplegia on that side also. The nape of the neck was blistered and a dose of calomel ordered. Profound stupor afterwards ensued, and he died on the morning of the third day. A post-mortem examination was not permitted.

J. C., aged 21, mail-cart driver, was admitted early on the morning of October 15. His horse falling, he had been thrown violently on his side in a bent position. On admission, his face was blanched, anxious and expressive of suffering. He writhed in apparent agony, and referred the pain exclusively to the left hypochondrium, though he was also much bruised about the head. His pulse was scarcely perceptible.

A small quantity of brandy was given when he was first admitted, and I saw him soon afterwards, and directed that heat should be applied to the feet, and fomentation over the abdomen.

On the following day he had rallied somewhat, but there was still much prostration: but little sleep; pulse quick and feeble; tongue white; pain and tenderness still great, and countenance pale and anxious. Water passed freely.

On the second day after admission the pain was more localised beneath the cartilages of the lower ribs on left side. Abdomen tympanitic. Urine passed freely though scantily; bowels not relieved. Twelve leeches were applied over the hypochondrium, and an injection was administered. From this date he has continued to improve and now takes food readily.

I have not followed these cases into all their details, because I wish to direct your attention particularly to the difficulty of diagnosis in these obscure but often fatal injuries, and to warn you respecting the risk you incur in giving a hasty or decided prognosis.

In the former case the circumstances seemed to justify the belief that drink, with some superadded concussion, accounted for the condition of the man on his admittance into the Hospital: more especially as the marks of external injury were of a comparatively trivial character; and even on the day after, though I apprehended and expressed my fear that there was serious mischief at the base of the skull, the symptoms were not alarming. There had been severe shock, with subsequent reaction, such as we often see recovered from. The subsequent course of this case leaves little doubt that extravasation took place within the skull, probably towards the base of the brain, and associated with fissure or fracture.

In the second case the symptoms were precisely such as attend a mortal injury, such as rupture of some abdominal viscus, membranous or glandular. There was severe shock; prostration almost to the extinction of life. Reaction was tardy and not active, yet the issue has proved that no vital organ could have sustained any lesion of structure; otherwise the patient could not be convalescent within a week.

In such cases as this latter, I venture to affirm that it is impossible for the most experienced Surgeon to distinguish between simple shock without organic lesion, and that which accompanies it; at least, I am unacquainted with any early distinguishing characteristic; and, therefore, the only safe prognosis is a doubtful one, and the only safe treatment an expectant one. Of course, the state of shock must be met by appropriate, but very cautious remedies. The bladder should be evacuated if the patient have any difficulty in performing this act for himself. The bowels should be kept at rest, and even opium given to aid in this, if admissible. Beyond such simple measures, and the administration of a light, farinaceous diet, nothing can be done but to watch for and meet symptoms as they arise.

Stone in the bladder in the female is of comparatively rare occurrence, and the opportunities you have of witnessing its removal are therefore comparatively few. As I operated on a little girl not long since, I take the present occasion to refer to this subject.

In many instances a stone may be removed from the female bladder without any cutting; that is, when there is such proportion between the size of the urethra and the foreign body as to admit of the passage of the latter through the former without any serious laceration. The dilatability of the female urethra is very great, and I have removed a stone of considerable size without either cutting or laceration. In the present case this proceeding was out of the question, as the patient was a child of five years old and the stone was evidently a large one. This child had never retained her water, and had suffered from symptoms of calculus from her birth.

I operated in the following way:—Having passed a small three-pronged dilator into the urethra, I opened the instrument and put the passage on the stretch. I was thus enabled to pass a straight blunt-pointed bistoury into the bladder, and to divide its neck and the urethra to a sufficient extent to introduce the forceps and remove the stone. The incision I made was downwards and outwards on the left side; in fact, in the same direction as in operating on the male. Indeed, I made the operation resemble, as nearly as may be, that in the other sex. The female urethra is the analogue of the membranous part of that passage in the male, and was thus reached at once without an external incision, which is, of course, requisite in the male. This little patient had not a single bad symptom. Freedom from suffering seemed a new existence to her. The urine continued to flow without power of retention when her mother removed her home. I have since seen her, and have examined the parts as well as the contracted aperture of the vagina would allow. The child is able to retain her water pretty well at night; but in the day time and when up she seems to have no power of retention. I believe that the urethra is still laid open into the vagina, and that though the aperture is gradually contracting, it is still too large to admit of the urine being retained. If this continue, some effort must be made to afford relief; but I trust it may not be needed. The stone—lithic acid—weighed nearly an ounce, and is 3¼ inches in its smaller circumference and 4½ inches in its larger.

I take this opportunity of exhibiting to you the detritus of a stone which I removed from the bladder of a patient a fortnight since. It has more the appearance and consistence of dried mortar than anything else, and crumbles between the fingers to an impalpable powder. I will briefly narrate the case before making a few general remarks on the operation of lithotomy.

W. S., aged 30, employed on the South-Eastern Railway, was a patient under my care about two and a-half years since, when he was the subject of a severe injury, viz. fracture of

the ramus of the pubes, and rupture of the urethra. He hovered between life and death for some time, but ultimately recovered, and returned, though enfeebled, to his work. About seven months since his health failed, and he had fever, followed speedily by symptoms of stone. He was admitted into the Hospital at the end of August, in a very suffering state, and with his general health seriously deteriorated. Some improvement was visible at the end of a month, as the result of rest, careful dieting and anodynes; and I operated on October 5. The stone was readily seized, but was crushed, as described, in the attempt to withdraw it. On successive occasions the forceps were brought out, with their blades filled with fragments; and finally, I washed out the bladder, before sending the patient back to bed. He took a good deal of chloroform, to which I attribute the irritability of the stomach which succeeded; bilious vomiting persisted all the following day, and ultimately subsided, rather spontaneously than from treatment. Since then he has been doing well; taking plenty of nourishment and stimulus, which is neeessary to keep him up. The wound is granulating healthily. On analysis, the stone proved to consist almost entirely of phosphate of lime. There was a very small quantity of lithate of ammonia and animal matter present.

Few, perhaps, if any, of the great operations of Surgery, have been the subject of more experiment than that of lithotomy. This was justifiable until certain principles were ascertained, and proved by extended observation and competent authority; but I venture to doubt whether the present state of our knowledge, and the general success of the usual lateral operation, warrants further attempts to deviate from the received mode of proceeding; I mean that of making a definite opening through the left side of the prostate, and reaching it by a corresponding opening in the left side of the perineum. It is true that the operation is not uniformly successful; but what capital operation is? and it must be borne in mind that the highest skill cannot secure success, where so important a viscus as the bladder must be laid open. Different Surgeons give a preference to various instruments to effect their object; but the matured experience of the most trustworthy bears testimony to the soundness of the principles on which Cheselden's operation is founded.

In the few remarks I propose to make on lithotomy by the lateral section, I will confine myself to the consideration of two methods of reaching the bladder,—that in which the staff is held throughout by an assistant, and that in which the operator takes the staff into his own hand after opening the urethra. I will then state my reasons for preferring the latter operation, and describe the instruments I use.

The former method of operating offers the advantage of leaving both hands at liberty, the one to hold the knife, the other to guide and assist it in cutting. In this mode of cutting into the bladder, a staff with a large curve and grooved at the side is required, and a dexterous assistant is also needed; otherwise I apprehend there must be more risk of injuring the rectum from the prominence of the curve which the staff presents in this direction. The urine, also, is prevented from escaping by the introduction of the left forefinger through the opening in the prostate. I have never practised this operation, but am informed by those who have that these are its special recommendations, and certainly they are great.

In that method of operating in which the operator takes the staff into his own hand, and depresses it as he enters the bladder, he is more independent of assistance in this most important stage of the operation; and the co-operation of the two hands thus employed in effecting this object compensates, I think, for the disadvantage of not being able to guide the point of the knife into the bladder. I do not, however, profess to advocate one operation in preference to the other. I have confidence in that method which I have practised, and therefore I adhere to it: whereas I know nothing practically of the other.

The desiderata in the lateral operation are—1. To make an external, free, and well-depending opening. 2. To open the urethra as far back as convenient. 3. To make a definite and sufficient opening in the prostate. 4. To take care that all cellular tissue and fascia intervening between the external wound and prostatic opening be freely divided. The object of a free external opening, carried well down by the side of the anus, is to facilitate the ready drainage of the urine. The urethra should be opened as near to the prostate as possible, as nothing is gained by its division further forward, and there is certainly greater risk of hæmorrhage if the bulb be laid open; I suspect, however, that this is more often done than is usually supposed. A definite opening through the prostate I consider very important; and, if that opening be sufficient for the introduction of the forefinger, it is sufficient for the removal of a stone of any ordinary size. But I attach no less importance to a free and entire division of every intervening texture between the prostatic and external openings; and this is best effected as the knife is withdrawn, by making it clear its own way to the bottom of the external wound. In this way a free track for the discharge of the urine is secured, without which there must be risk of lodgment and consequent mischief. This is most likely to occur within the first day or two, for afterwards the spaces between the areolar mesh are blocked by adhesive matter; but at an early period, if the urine have any spot to rest in, immediate mischief results; the infiltration goes on, and from this cause and the inflammation which is set up, from contiguity, in the neighbouring areolar tissue, serious consequences speedily ensue. The simple flow of the urine over the divided track does not seem to entail trouble, but its lodgment, I believe, invariably does.

I use a staff of moderate curve, and grooved on the back. The curve does not exceed two and a-half inches, the rest of the instrument being straight. The urethra is not thus distorted, as I apprehend it must be with a staff of large and long curve, or with a straight staff. I have it held nearly at right angles to the body, with the point within the bladder: I thus cut on the straight part of the staff, or just where the curve commences, and have not to depress it very much as I cut into the bladder. I use, for my first incision, and to cut into the urethra, an ordinary scalpel, and then exchange this instrument for a scalpel, fixed in a strong and firm handle, and with a broad belly, and a button point which runs freely in the groove of the staff. At one time I cut throughout with the same knife—of course a sharp-pointed one; but I am satisfied there is some risk, in doing so, of wounding the bladder; and I regard the few seconds which are lost in this exchange of knives as nothing in comparison with the risk mentioned, although it may be trifling. With the knife I have mentioned, I am able to make a definite and sufficient opening through the prostate, without cutting it as I withdraw the knife: and in this way I believe I combine the chief advantage of the gorget with the greater manageability which recommends the knife. After this section the bladder retains sufficient water to allow of the ready seizure of the stone. I need scarcely add, that the forefinger of the left hand should be passed through the prostatic opening and the stone felt, before the staff is withdrawn: the finger then serves to guide the forceps into the bladder.

After the removal of the stone, it is the custom with some Surgeons to introduce a tube into the bladder to secure a passage for the urine. I do not see any objection to this plan, nor do I see any advantage to be derived from it in ordinary cases; the urine will still drain by the side of the tube. But it is very useful where there is hæmorrhage, as the wound may be safely plugged around a tube; whereas it would be extremely unsafe to plug the wound without such arrangement. The tube may also be advantageously used where the prostate has been contused by the removal of a large or rough stone, and its probable swelling, and consequent blocking of the opening, may be anticipated.

The general treatment of patients who are the subject of lithotomy is no unimportant element of success. It is to be remembered that in opening the bladder in a comparatively healthy person, we inflict a serious organic injury, and that a certain amount of shock must be expected as the consequence, followed by reaction. The skin will become heated, the pulse quickened and the tongue furred. This condition is to be looked for, and not regarded with apprehension. The previous evacuation of the bowels allows of their being left at rest for two or three days afterwards. The diet should be simple and unstimulating for a time; in some cases, however, stimulus is required early, especially where the patient has been habituated to it. Gin is a favourite remedy among the poor, when anything is amiss with the urinary organs, and even young children are not unfrequently dosed to a considerable extent with it. I have often noticed some little tenderness in the iliac fossa, without any further symptoms to create alarm. I have occasionally had hæmorrhage to control: this has been effected either by pressure on the pudic artery, or by plugging the wound after the introduc-

tion of a tube. In one case of secondary bleeding, induced by continued vomiting after inhaling chloroform, I nearly lost a little child. In one instance a communication was established between the rectum and wound, in consequence of laceration by the large angular fragments of a hard stone, which broke in the forceps: this wound entirely closed. And in one case, where the stone was very large, and the patient deformed, abscess of the prostate burst into the rectum about a week after the operation. The communication between the rectum and bladder in this case was permanent, and too high up to attempt any operative interference. The patient, however, informed me that he was not seriously inconvenienced by this false passage. Beyond the above, and the loss of a solitary case—an infant of twenty months with a disorganised kidney—I have no special experience to record: all of my other cases have recovered. The largest stone which I have removed—indeed, here are two of nearly the same size—weighs more than a quarter of a pound, and the smallest, which I have also brought to show you, weighs only five grains. Yet these small stones often occasion great suffering; and I may here remark that, as a rule, smooth stones, such as the lithic acid, are the source of greater pain than rough ones, such as the mulberry. I suppose in one diathesis the bladder must be more irritable than in the other, or it becomes more protected by a copious secretion of viscid mucus. I may also observe that the patients who have suffered most pain, *cæteris paribus*, make the best recovery.

ORIGINAL COMMUNICATIONS.

CASE OF EPILEPSY, WITH LOSS OF SPEECH AND OTHER COMPLICATIONS—RECOVERY.

By EDWARD B. GRAY, M.D. Oxon.
One of the Physicians to the Radcliffe Infirmary.

I am indebted to Dr. Acland's kindness for permission to make use of the following case, which occurred some time ago in his Hospital practice, and which I watched with great interest:—

Jane C., aged 7 years, was admitted into the Radcliffe Infirmary on April 25, 1860, for epileptic fits, accompanied with certain complications presently to be mentioned.

Appearance and General Condition.—A fairly well-nourished child, with light hair, a clear, transparent skin, a finely-chiselled pretty face, and a remarkably pleasing, intelligent expression. Skull firmly ossified, large in proportion to body, especially in its occipital half. Scalp veins large, and turgid with blood, but no headache or undue heat of scalp. No prominence of forehead or protrusion of eyes. No signs of rickets or struma, no history of worms, no carious teeth, no discharge from either ear.

Although keenly alive to everything said and done around her—in fact, the very reverse of a listless child—she was never observed, and never could be made, to speak or laugh,(a) even under circumstances very provocative of exclamation or laughter. At the same time, the organs of speech and of facial expression were apparently perfect. She enjoyed full power over the facial muscles. The tongue, also, could be protruded to its full length, and turn itself in any direction with the utmost readiness and precision. Deglutition unimpaired. The sense of hearing perfect. Pupils contracted naturally. No squinting, drowsiness, or giddiness. Heart and lungs sound. The bodily functions all healthily performed; her only ailment being these epileptic fits, attended with inability to speak or laugh.

Nature of the Fits.—They came on without warning, consisting in loss of consciousness for about a minute, during which time the head was generally bent gradually forwards till the chin touched the sternum, and irregular slight spasms of the muscles of the face and eyes took place. The right hand was generally stretched out in front, the index finger being stiffly extended and the other fingers contracted, as though she were pointing at some object. The tongue was never seen to be bitten. There was rarely any turgescence or lividity of the face. During the fits she used to make feeble guttural sounds, much like the noise of a guinea pig. The convulsive movements were usually so mild, that if a fit occurred while she was on her legs, very slight support sufficed to prevent her from falling. After a minute or so she would suddenly and completely recover, shake herself just like a dog, then affectionately kiss the person who had supported her, and go on with her walk, or whatever she might have been engaged in, just as though nothing had happened. The fits occurred almost every hour of the day and night, but were always more numerous when she first lay down. Not the least stupor followed the fits; and notwithstanding their frequency, she hardly ever evinced in the intervals that sullenness and irritability so commonly found in epilepties, but, on the contrary, was singularly cheerful and good tempered.

History.—Both parents alive, healthy, and well to do. She was one of nine children, two of whom had died. One of these, a girl, aged 3 years, was said to have "had a very big head, and died of disease of the brain." The other, a boy, died "of convulsions" one month after birth, but with nothing unusual in the shape or size of his head. The remaining children were healthy.

Jane, by her mother's account, had always been a sharp child, showing an aptness and fondness for learning much greater than is usually found in children of her age. She always had a big head, but whether it had latterly increased in bulk the mother had not observed. During the latter part of 1859 she was at school, and the ambition to beat her fellow scholars induced her to study very closely. It was about the ensuing Christmas that the mother first noticed anything amiss with her. She would then occasionally wear a strange, vacant look, and remain either unwilling or unable to speak for several seconds, after which she would run and toss herself about in a semi-choreic manner and in unusually high spirits. This would sometimes happen in the middle of a game of play, and her odd looks and extravagant capers at such times used to be remarked by her play-fellows.

Such was her condition for the next three months—*i.e.*, till about the end of March, 1860—when these symptoms passed into regular fits, such as those above described. Nothing was noticed amiss with her speech till early in April, after which it became gradually more and more impaired, and the fits more frequent, up to the 25th, when she came into the Infirmary.

Treatment and Progress.—For three successive mornings she was well purged with castor oil and turpentine, on the possibility of her having worms, but none came away. During the next two months she tried in succession Zinc, Steel, tincture of Digitalis (mij. doses), tincture of Indian Hemp (miv. doses), Chloroform (mij. doses, by mouth), Quina, and tincture of Aconite (mij. doses), and for about three weeks of the time had an issue in her left arm. Careful attention was all the while paid to the state of her bowels. Occasionally for two or three days there would be some little improvement; then the fits would return as often as ever. About the second week in June a new symptom appeared. Without any soreness of throat or obstruction in its passage, she had great difficulty in swallowing. This symptom lasted about ten days, then subsided, and did not recur. By the beginning of July the fits and other symptoms were no better than they were on admission; and her general health, spirits, and temper were not so good. On July 15 she began to take Syrup. Ferri Iodid. ʒss. three times a-day, with a saline aperient, containing a little quinine and sulphate of zinc, every morning. Antimonial ointment also was rubbed daily into the nape of the neck, often enough to keep up a crop of pustules. The fits now immediately became less frequent, and after July 29 she never had another. The treatment just mentioned was continued for about a month or five weeks after their cessation. Speech was very gradually recovered. The first time she could utter a distinct word was on August 8, when, to her great delight, she could say "cherry." Each succeeding day she mastered some fresh word, and by the end of September she could speak with tolerable fluency.

Gradually too she recovered the power of laughing. Her first attempts at this were most interesting to watch. When anything amused her much, she gave vent to her feelings by an odd sort of inward chuckle; the facial muscles responding

(a) Whether she could cry is uncertain. She was never seen to do so in the Infirmary.

to her tickled fancy only by a few disorderly, unilateral, spasmodic twitchings—not by that steady bilateral and co-ordinate play which constitutes a natural smile.

She was discharged cured on October 3, 1860, and continues quite well up to the present time.

Remarks.—It is interesting to consider the probable cause of the fits and the accompanying symptoms in this case:—

1. What was the cause of the fits? Was it centric or excentric? There are several reasons for believing the cause to have been altogether centric. As above stated, there were no excentric causes of irritation discoverable. The peculiar shape of the skull, and the fact that a brother and sister had already died of some head affection, argued in some degree a predisposition to brain mischief in herself. Again, the loss of speech; the impairment of the reflex facial movements, and (at one time) of the power of swallowing; the semichoreic movements which existed at the beginning; the fact of the recurrence of the fits being favoured by the recumbent posture; all these show that centric, *i. e.*, cerebral, mischief of some kind really did exist.

2. Believing the cause of the fits to have been within the brain, is there any evidence as to the exact nature and seat of the brain affection? We think there is. As she never suffered from fever, headache, drowsiness, or vomiting; as there was never any intolerance of light nor squinting; nor unnatural condition of the pupils; and, as in the intervals between the fits her general health was tolerably good and her mind sound, we cannot suppose that any congestion or inflammation of the substance of the brain or its membranes, or any effusion into its cavities, ever existed to cause the fits. The enlargement of the head was quite unlike that which occurs in hydrocephalus, being confined chiefly to the occipital portion, and very different from the uniform enlargement of a hydrocephalic head, with its protruding eyes and overhanging forehead.

The history of the case, therefore, renders it highly improbable that any portion of the cerebrum or cerebellum could have been the seat of mischief. Consequently, we are driven to suspect that the real cause of the fits was some affection, causing temporary derangement of the functions, of the only remaining portion of the intra-cranial nerve matter, viz., the medulla oblongata. Now, such a supposition is in strict accordance with the result of the researches of Schroeder Van der Kolk on epilepsy and other diseases characterized by general convulsive movements. He seems to us, in his elaborate treatise on the "Medulla" (translated by the New Sydenham Society), to have proved most conclusively that in diseases of this kind, whatever and wherever may be the ultimate cause of irritation, the medulla oblongata is "the proximate starting point" of all general, *i.e.*, bilateral, reflex movements or convulsions.

The case itself, moreover, presents certain *complications* which point to the medulla as the seat of mischief; I allude to the lesions of speech, of deglutition, and of facial expression, phenomena which are under the control of special groups of nerves having their origins in this great nerve-centre.

1. The loss of speech was not due to any want of effort. She would often try hard to articulate any given word, and seem vexed at her inability to do so. Neither could it be attributed to forgetfulness of the meaning of words, or loss of the (mental) faculty of combining them in a sentence. Lesions of speech depending upon this cause are said to be nearly always accompanied with some serious structural changes in the cerebral hemispheres, and patients so affected are found to miscall things, constantly designating them by terms with which they have no connexion. Such was not the case with this little girl. Both when she was losing and when she was recovering speech, she always *remembered* words well enough; her difficulty was to *articulate* them. Nor, thirdly, could the loss of speech be ascribed to any paralysis of the muscles of the face or tongue. This was carefully noted. The tongue, as was said before, could be moved in any direction with the utmost readiness and precision. Why then was she unable to speak? Schroeder van der Kolk (*Op. cit.*, p. 140—169) proves clearly, by pathological and physiological observations, that in the production of speech, three agents are always concerned; first, the will; secondly, the olivary bodies; thirdly, the hypoglossal nuclei, from which proceed the hypoglossal nerves; that, if the olivary bodies become diseased, the will can still act on the hypoglossal nuclei, and cause the tongue to execute any amount of simple, unilateral movement, but can no longer excite the harmonious, complicated and bilateral movements of its muscles necessary for the production of speech. This latter is a special function of the olivary bodies, and it must have been the suspension of this function in Jane C—— (from some affection of these ganglia) which was the cause of her inability to speak.

2. The lesions of deglutition and of reflex facial expression, likewise point to the medulla oblongata as the seat of mischief. Her inability to laugh, although the voluntary power over the muscles of the face was unimpaired, is a fact of some physiological interest. It tends to prove that the complicated movements of the face in laughing (and in the expression of the passions generally) are in reality reflex, (b) and not excited by the direct influence of the will on the facial nerves, in other words, that they are under the control of some nerve-centres (the olivary bodies according to Van der Kolk) intermediate between the will and these said nerves. This little girl had the will to laugh, and full power over all the muscles concerned in laughing, just as she had the will to speak and full power over all the muscles concerned in speaking; but she could no more laugh than she could speak, and for the same reason,—because there was suspension of the functions of those auxiliary and intermediate nerve-centres (the olivary bodies), which acting in obedience to the will, produce those simultaneous, co-ordinate, and bilateral muscular movements, on which depend lingual articulation in the one case, and facial expression in the other.

Thus the consideration of these accompanying lesions enables us to make a very reasonable guess what was the exact seat of mischief. It was probably in the medulla oblongata, and more particularly about one or both olivary bodies, implicating either them or the strands of connexion which associate them in function with each other and with the facial and hypoglossal nerves.

There is less evidence as to the nature of the mischief than there is as to its seat. Perhaps the most probable supposition is this: that the over-working of the brain in a child, who had already some tendency to over-growth of that organ, caused vascular congestion and disorder of function in a certain portion of it, viz. the medulla oblongata.

How much the treatment had to do with the cure, it is impossible to say; but supposing our interpretation of the case to be correct, it is reasonable to believe that the remedies last adopted were at least such as would facilitate recovery.

Oxford.

CLINICAL MIDWIFERY.

By ROBERT LEE, M.D., F.R.S.
Obstetric Physician to St. George's Hospital.

(Continued from page 452.)

Case 731.—On July 5, 1857, I was requested to see a lady, aged 40, whose first labour had commenced at 5 a.m. the previous day. "At twelve yesterday the progress not great, The os being high up and little dilated. Head presenting twelve last night,—strong labour and the head come through. the os uteri, the whole having passed up over the head. The pains have continued every minute, rather short; but to this time, 10½ a.m., there have been regular pains, and the head is now resting on the perineum and rather disposed to pass through. A portion of the head has cleared the labia, and there is decided progress." On receiving this report I said, "I will not go up-stairs, but recommend delay; I will go home and wait the result." 3 p.m.—The head has not advanced in the slightest degree for six hours. It has not yet passed through the brim of the pelvis, and an ear cannot be felt on

(b) Van der Kolk in summing up the results of his investigations (*op. cit.* p. 180) observes, "To the corpora olivaria would therefore belong the complicated actions in the expression of the passions, which may be reduced to a species of reflex actions, as in them we bring our face into motion almost without being conscious of so doing, and particularly as this expression is the same in all men. We may, indeed, voluntarily produce the same movements and so artificially imitate the passions. . . . . But we do this rather by mentally exciting in ourselves the feelings we wish to express than by any special influence on the muscles of the eyes, mouth, etc." In support of this (viz., the reflex theory of facial expression), he quotes from Romberg two very apt cases; one, in which there was complete paralysis of the face, while the patient could laugh quite naturally; another, in which there was no paralysis of the face, while the patient was unable to laugh on the one side.

either side. There is great tenderness of the soft parts, so that the finger cannot be introduced and passed around the head to feel for an ear without giving great pain. The parts have been subjected to as much pressure as they will safely bear. The pains have no sensible effect in pressing forward the head, and I am satisfied that the head will never pass by the natural efforts. The labour has lasted thirty-five hours, and there has been no progress for six or eight. It is impossible to be certain whether the child be alive; the sound of the fœtal heart cannot be heard, but in most cases of this kind where pressure has been exerted so long, it has destroyed the child. The life or death of the child it is absolutely impossible to be quite certain of, but this is not the question now actually before us. Is it safe to leave Mrs. H. longer in labour? Is there a hope that Nature will complete this labour? I believe there is not a ray of hope, and, I believe, from the state of the pulse (120) and countenance, with white furred tongue, that her life will be exposed to great danger if she is not soon delivered, and that the forceps cannot be applied with safety. The Medical attendant, an experienced Practitioner, having entirely concurred in opinion with me, at 3½ o'clock I opened and extracted the head, and the force required to effect this proved to our entire satisfaction that our opinion was correct. I have omitted to mention that the meconium had been escaping for many hours. The state of the child proved that it had been dead before the labour commenced. The patient recovered without an unfavourable symptom, except the inability for a few days to pass the urine without a catheter.

Case 732.—On Thursday, July 16, 1857, I was requested to see a lady who was stated by her husband to be in extreme danger from uterine hæmorrhage after the birth of the child. I found her dead. On raising the bedclothes I saw the uterus completely inverted, and the placenta still partially adhering to it. I detached the placenta and restored the uterus to its natural situation, but the patient was dead. How the accident had occurred I did not learn precisely, and the nature of it was not known till after the patient's death, and is not known now to her relatives, I believe. On detaching the placenta before re-inverting the uterus, blood flowed copiously from the exposed orifices of the veins of the lining membrane of the uterus. I saw none flowing from the uterine surface of the placenta.

Case 733.—On Wednesday, July 23, 1857, I was called to see a patient, Mrs. B., a stout, plethoric woman, aged 32, attended by Mr. Driver and Mr. Sharpe, near Buckingham-gate, in the 6½ month of her second pregnancy. After suffering from intense headache, she was seized this morning with convulsions at five o'clock, and had several severe fits. At six I saw her, when she was completely insensible, with stertorous breathing, having just recovered from a violent fit. She had been bled from the arm freely, and leeches had been applied to the temples. Ten grains of calomel had been given, and an enema administered. The fits continuing, and a state of complete stupor, like apoplexy, supervening, delivery was considered necessary. There was no symptom of labour. The os uteri was a little open, allowing two fingers to enter. The presenting part could not be felt. The hand could not be introduced to deliver by turning. The head was found to be the presenting part. I opened the head with the perforator and drew it through the os uteri with great difficulty. The fits ceased soon after delivery. A year after, this patient complained much of pain in the nape of the neck.

Case 734.—On July 27, 1857, I received the following note from Mr. ——:—"I have another case of deformed pelvis, which I think requires your kind assistance and opinion immediately." This patient had been twenty-four hours in labour—head jammed in the brim; soft parts greatly swollen. No chance of the head passing. No one but a mad man would have thought of the long forceps, or of the operation of turning in such a case. I opened the head, and after strong extracting force had been employed for some time the head came through the brim almost with a jerk. This patient had been delivered by another Practitioner three years before by the same means, after a most severe and protracted labour. No sloughing followed either the first or second labour.

Case 735.—On August 24, 1857, I saw a patient from the Bahama Islands, whose perineum had been ruptured three years before in her first labour. It was by her report a rapid labour, but the Practitioner in attendance did not support the parts when the head of the child was being born. He followed the practice since inconsiderately recommended. He sat talking about things that had no connection with the labour, and to this the accident was attributed. A Surgical operation was performed four or five months after the labour without any benefit. She had dysentery in the West Indies, and this was not wholly gone, but her health had improved since her arrival in England, three weeks before. The sphincter ani had not been much injured. She could, when sitting or lying, retain the contents of the rectum, and when the bowels were confined, when standing and walking, the contents of the rectum escaped involuntarily. As her strength had been extremely reduced by diarrhœa, and as her health had greatly improved since her arrival in England, she was recommended to spend some months at the sea-side, before another attempt was made to reunite the lacerated parts by a Surgical operation.

Case 736.—Mrs. ——, aged 34. Mr. ——, September 3, 1857. About the age of 13 had an affection of the spine, and during six months lay several hours daily, but took exercise at other times. Till near 20 the affection of the spine continued, and there was a caustic issue about the dorsal region. The lower extremities were never affected with paralysis, and the bones are not bent. She was always able to walk. Catamenia appeared at 14, and have been regular. Married on February 18, and was regular three times after. About the 4th or 5th of June the last period occurred. Has had a little sickness in the morning. There is shortness of breathing at times. I was called upon to determine whether or not the bones of the pelvis had become affected. It was a lateral curvature of the spine high up. There was no angular projection. The point of the finger could not reach the base of the sacrum, from which I concluded that there was little or no distortion of the brim. The arch of the pubes I thought small. I recommended the Medical attendant of Mrs. —— not to induce premature labour, and she went to the full time, and was safely delivered without any instruments or artificial help of any kind being required.

Case 737.—On Saturday, September 19, 1857, at nine a.m., I saw a lady, in consultation, about the age of forty, whose first labour had commenced twenty-four hours before, and there had been no progress during eight hours. Mr. —— thought the breech presented. I had at first some difficulty in determining positively what the part was which presented. At last I felt the eyes near the symphysis pubis, then the mouth, then the smooth part of the head was felt high up in the hollow of the sacrum. The os uteri was not fully dilated; it surrounded the whole of the presenting part. I advised the Medical attendant to pass the catheter and empty the bladder, which contained a very considerable quantity of urine. This was done with difficulty. It seemed prudent to wait some hours to see what course the case would take. At two p.m. the pains had entirely ceased. There had been no progress made, and there appeared no prospect of doing any thing but mischief with the forceps. It was accordingly determined to lessen and extract the head to save the patient from the alarming condition in which she was. In spite of every care, the perineum was lacerated, but not to a great extent. The pulse continued extremely rapid after the delivery, and in twenty-four hours all the symptoms of acute peritonitis supervened, and the case terminated fatally. If there was any mistake committed in this case, it was in leaving the patient too long in labour, in the hope of saving the life of the child.

Case 738.—About 2 p.m. on Friday, September 25, 1857, I saw a lady, in consultation, who had been in labour twenty-four hours. The head presented, os uteri dilatable, but not more than half dilated. Membranes not ruptured. A relative of the patient was bent on chloroform, and the Medical attendant spoke of using the long forceps. I said this would be most unjustifiable. The membranes were not ruptured, the os uteri was not more than half dilated, and the head had not passed through the brim. I urged the propriety of waiting. There was no sign of injurious pressure. The parts were soft and relaxed. No local mischief. Pulse soft, and not 80. Tongue a little furred. No headache. "How many hours are we to wait?" was the question put to me. The answer was, "The symptoms must be carefully watched. If any should arise by all means deliver." I advised rupturing the membranes and very gently dilating the os uteri. No chloroform and no ergot to be given. I expressed a hope that

the head would come sufficiently low for the forceps to pass without any artificial assistance. In this I was informed that I was wrong, and I did not see the patient again. The labour having continued five or six hours after, and there being no progress, delivery was accomplished by craniotomy. Hæmorrhage followed, but I believe the patient recovered favourably.

Case 739.—On September 27, 1857, I was requested to see a lady near Fulham, aged 30, who had been forty-eight hours in her first labour. A great part of the head was within the pelvis. There was retention of urine, and great difficulty was experienced in introducing the catheter. The vagina and all the external parts were prodigiously swollen, and the pains had entirely ceased. The head also was swollen. There were two very experienced and judicious Practitioners in attendance upon the patient, and after due reflection we arrived at the conclusion that the forceps could not be applied without the utmost danger to the mother, and we could not be certain that the child was alive. The tongue furred, the pulse extremely rapid. The necessity for immediate delivery was obvious. I lessened the head, and in extracting it took every precaution to avoid contusing the soft parts further. After a tedious operation it was at last safely accomplished, and the patient recovered very favourably. On October 6 I was informed that "there had not been a bad symptom." We were all pleased that the parts did not slough.

Case 740.—On Wednesday, October 7, 1857, at 2 p.m., I received the following note from a Medical Practitioner:—"I have here a very tedious case of labour, which I fear will require some interference. Would you kindly come to me in this difficulty as soon as you conveniently can this afternoon?" The patient was 30 years of age; it was the first labour, and the head was presenting. The labour had commenced thirty hours before, with rupture of the membranes. The pains had been gradually becoming weaker. The forehead of the child was under the symphysis pubis. An ear could not be felt. An attempt was made to deliver with the forceps, but this having failed, the head was lessened and extracted. It was soon afterwards discovered that there was a second child. I immediately passed up my right hand into the uterus, ruptured the membranes, brought down the lower extremities, and delivered without difficulty. This child, a boy, was born alive. The placentæ adhered. I passed up the hand again into the uterus, detached them, and took them away. No hæmorrhage of any consequence followed. The patient recovered most favourably. The boy born on this occasion succeeded to an estate not many months after his birth.

Case 741.—On November 22, 1857, I saw a patient in Long-acre, who had been long in labour—upwards of thirty hours—with her first child. Four full doses of infusion of ergot of rye, with spiritus ammonia compositus had been given. A large loop of the umbilical cord destitute of pulsation was in the vagina; the head had not passed through the brim of the pelvis. The child being dead, and the forceps never being justifiable, except where there is every reason to believe that the child is alive, I recommended that the patient should be immediately delivered with the perforator or crotchet. The pelvis being distorted, even if the child had been alive I should have urged the necessity of an immediate delivery by this method, as the only means of relieving the patient, and obviating the danger with which she was threatened. Under the circumstances, and as there was no advantage to be derived from leaving her longer in labour, but the contrary, I proceeded, with the full approbation of her Medical attendant, to open and extract the head. I would not allow chloroform to be given to make her insensible, because consciousness is a safeguard to patients in all the operations of midwifery. Recovered favourably.

ON THE PATHOLOGY OF ASTHMA.

By H. HYDE SALTER, M.D., F.R.S., F.R.C.P.,
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In the *Dublin Quarterly Journal of Medical Science* for May, 1861, there is an able article by Dr. Kidd, of Dublin, on the Pathology of Asthma, in which he advocates a theory of the disease which is so plausible, and with which so many of its phenomena might appear to be consistent, but which is in my opinion at the same time so erroneous and would be so obstructive, if adopted, to the progress of our knowledge of the disease and its rational therapeutics, that I should very much regret if the arguments in support of it were considered unanswerable by the numerous readers of that journal, and should very much wish to expose, in the same candid and courteous way in which Dr. Kidd's paper is written, the untenability of the views he advocates.

Dr. Kidd's theory is that asthma essentially consists in an irritation of the cerebro-spinal nervous centres, and that its phenomena immediately depend on a state of tonic contraction of the muscles of inspiration. This is a theory that I have mentioned and controverted in my book; but the theory there referred to differs from that of Dr. Kidd, in that he includes among the muscles of inspiration the bronchial muscle. Dr. Kidd's statements of his views, which, at the cost of a little length, I think it better to give in his own words, is as follows:—

"The circumstances to which I would draw particular attention are, that instead of the thorax being constricted, and the diaphragm and abdominal viscera being drawn up into the chest, causing a hollow at the epigastrium generally described as occurring during the fit of spasmodic asthma, it is found, on careful observation, that the thorax is distended to the greatest extent—that it measures from two to three inches more in circumference than during the interval,—that the intercostal spaces are widened, — that the diaphragm is pulled down to the fullest extent, so as to produce great fulness of the abdomen, and cause the heart's impulse to be felt at the scrobiculus. The sounds, moreover, afforded by percussion over the thorax, instead of being dull are found to be clear, and it is as evident that the whole chest is full of air; and on stripping the patient, it is seen, that not only are the muscles of ordinary inspiration in a state of violent action, but that those of forced inspiration are also called into requisition, distending the thorax to the utmost."

After quoting some passages from my book in confirmation of the above description, and remarking that, in consequence of adhering to the exclusive and isolated principle that asthma depends altogether on the spasmodic action of the bronchial muscles, I do not recognise the teachings of my own clinical observations, Dr. Kidd thus proceeds:—

"In birds, who have no diaphragm, and who have the ribs connected by osseous prolongations with a sternum so large as to cover almost the entire front of the body, the natural state resembles closely that of the human subject when labouring under asthma. 'The natural state of this bony framework,' says Dr. Carpenter, 'is such, that when no pressure is made upon it the cavity it encloses is in a state of distension; and the state of emptiness can only be produced by a forcible compression of the framework, through an exertion of muscular power. In the state of distension, therefore, which is natural to the cavity of the trunk, the lungs are expanded, and fill themselves with air, which they draw in through the trachea; and this condition they retain till, by the action of the external muscles on the bony framework, the cavity of the trunk is diminished, and the air is expelled from the lungs and air-sacs, which are again filled as soon as the pressure is taken off.' Now, during the fit of asthma, the state of the thorax and the mode of respiration closely resemble that natural to birds. The chest is distended to the fullest extent, being kept so by the spasmodic action of the muscles of inspiration. When the patient desires to breath, he must first bring a strong voluntary effort to the aid of the muscles of expiration, so as to compress the thorax, and as soon as he relaxes this, the muscles of inspiration, being in a state of tonic or persistent spasm, expand the cavity again, and cause fresh air to rush in through the trachea. In the healthy state of the human subject there is always a rest after each expiration. We have first an inspiration, then an expiration following immediately, and then a post expiratory rest, occupying a time considerably longer than that of the inspiratory and expiratory movements combined. In asthma this post-expiratory rest is lost; the moment the expiration is completed, the inspiration begins—there is no pause. In fact, as has been already remarked, it seems plain that the muscles of inspiration are, during the fit of asthma, in a constant state of tonic contraction; and that the great difficulty is to empty the chest, so as to allow of its being refilled with fresh air. For this purpose the muscles of expiration are constantly contending with those of inspiration, and require the aid of a strong voluntary effort to overcome them. In consequence

of the state of distension in which the chest is during the fit, and of the necessity of overcoming the tonic spasm of the inspiratory muscles, it occurs that the relative length of inspiration and expiration is reversed; instead of the inspiration being longer than the expiration, as is normally the case, the expiration is longer than the inspiration,—four or five times as long; and at the same time the inspiratory movements are infrequent, not more than nine or ten in the minute.

"While an examination of the phenomena of the asthmatic fit proves that the entire muscles of inspiration are in a state of spasmodic action, many circumstances show that the bronchial muscles are also concerned, and are, too, in a state of spasmodic action. This is most easily demonstrated in slighter attacks, where, on applying the ear to the chest, it is found that the respiratory sounds are heard in an undulatory sort of way, marking the dilatation and contraction of the bronchial tubes, and that the points of constriction are constantly changing their site."

In the above passages two things are endeavoured to be shown: First, that my theory of asthma is erroneous; and, secondly, that the disease essentially consists in tonic spasm of the muscles of inspiration. Let me, as briefly as possible, show that the pathology of asthma I advocate is consistent with all the clinical phenomena which the reviewer cites, and then point out certain facts which are incompatible with the views he advocates.

The clinical phenomena on which he principally relies in support of his theory are:—

The chest-distension,

The locked-up condition of the air, and

The special expiratory difficulty which gives the prolonged expiration.

Now, I maintain that these three conditions are just such as spasm of the bronchial tubes would produce.

It would create the first—the chest-distension—simply by creating the demand for air. In all diseases, or conditions, in which the aëration of the blood in the lungs is in arrears, chest-distension is present; in bronchitis, croup, laryngitis, violent exertion, I have noticed it, and always in proportion to the dyspnœa. It depends on an involuntary and instinctive effort to fill the chest, and is an inevitable result of the law that in ordinary breathing associates inspiratory effort with the *besoin de respirer;* when the one is exalted so is the other. Dr. Kidd says that if the tubes were contracted, this additional quantity of air, necessary to produce the state of distension, could not be got in. I cannot admit this; we know that air *is* got in and out at each respiration; and a slight excess of inspiration over expiration would, in a few respirations, give any amount of chest-distension.

How bronchial spasm would produce the locked-up, stagnant state of air in the lungs, I need not explain.

The third condition, the special difficulty and prolongation of expiration, is produced by the bronchial spasm thus:—

It is manifest that anything narrowing the bronchial tubes must offer a bar to the ingress and egress of air equally—must equally affect inspiration and expiration; that is, supposing these acts are performed by equal forces. But these forces are *not* equal; the *in*spiratory force is a strong force—muscular action, while the expiratory is a weak one—elastic resiliency; thus the obstruction is easily overcome by the one, and with great difficulty by the other; the muscular inspiration quickly draws the air in through the narrow tubes, the passive expiration slowly and tediously drives it out again. When the same kind of force as has performed the inspiration comes to the assistance of the expiration, namely, muscular action, the air is immediately pumped out and expiration completed, as is seen in a form of respiration characteristic of the intensest asthma, where a tedious and almost imperceptible expiration is suddenly terminated by an expiratory jerk; in the first half of such an expiration the air is driven through the narrowed tubes by the ordinary expiratory force—elasticity, in the last by the extraordinary expiratory force—muscular action. The simple reason, then, why in asthma expiration is so much more prolonged than inspiration is, that unequal forces unequally overcome the same obstruction.

Let me now, in the second place, cite the facts which I believe to be perfectly inconsistent with Dr. Kidd's theory.

1. In the first place, he says that the bronchial muscles are muscles of inspiration; that at each inspiratory act the bronchial tubes are contracted, and relaxed at expiration. "There are," he observes, "few problems in physiology more difficult of solution than that of the function of the bronchial muscles. The theory as to their use that seems to me to accord with the greatest number of facts is, that they are muscles of inspiration, and, if this can be proved, it will afford a satisfactory explanation of their being associated with the other muscles of inspiration in the production of a fit of asthma. The principal fact on which this theory is founded is the difference between the duration of inspiration and expiration. Fournet says that in health the inspiratory sound is five times longer than the expiratory. Now, if a volume of air occupies a certain length of time in passing into the lungs, and passes out again in one-fifth of that time, it is evident that it must either be pressed out with greater force than it passes in, or the tubes through which it passes out must be wider than those through which it passes in. One or other of these propositions must be true:—(1) Either the force of expiration must be many times greater than inspiration; or, (2) the bronchial tubes must be narrower during inspiration than they are during expiration—*i.e.*, the bronchial muscles contracted during inspiration and the tubes narrower, and relaxed during expiration and the tubes dilated." The former of these suppositions is eliminated by showing that in order to explain the relative lengths of inspiration and expiration by the difference of the forces executing them, it would be necessary to suppose the force of expiration at least ten times greater than that of inspiration; the other alternative, therefore, remains, viz., that the tubes must be contracted during inspiration.

For the arguments against the bronchial muscles being muscles of respiration at all, either of expiration or inspiration, I must refer the reader to my work on Asthma, p. 22. But supposing they were so, as Dr. Kidd imagines, and contracted at each inspiration, relaxing at each expiration, what effect would they have? Exactly the reverse of what Dr. Kidd supposes; they would antagonise instead of assisting it; instead of being muscles of inspiration they would oppose inspiration; for it is manifest that the air cannot be drawn in with the same facility through contracted as through patulous tubes. Indeed, Dr. Kidd's explanation of the prolongation of inspiration (as contrasted with expiration), by this supposed contraction, implies an inspiratory obstruction. One would almost think (what, indeed, I have often observed in writers on the physics of respiration) that Dr. Kidd imagined that the air was driven into the air-cells, not drawn into them, and that the contraction of the air-tubes helped to force it in. But it must never be forgotten that the motive power of inspiration is entirely at the superficies of the lungs, that the lungs themselves are passive, and the parietes of the chest the only active agents. Moreover, if the law of bronchial contraction were such as Dr. Kidd supposes, and it were in operation during asthma, it would have just the reverse effect of what we see; it would lengthen inspiration: whereas it is expiration that is so lengthened, the relative proportion of the two acts being entirely reversed. Thus Dr. Kidd's own theory (unless he supposes that during asthma the time of the contraction of the bronchial tubes is exactly reversed) is inconsistent with that very prolongation of expiration which it ought to explain.

2. In the breathing of asthma we have evidence that at inspiration there is a partial vacuum formed in the chest, that the lungs are unable to expand to the degree to which the parietes are endeavouring to expand them, that the air is rarefied thereby, and that the atmospheric pressure thus not being balanced, forces in those parts of the parietes that are yielding. Only in this way can be explained the deep sucking in of the surface beneath the ribs, between the origins of the sterno-mastoids, and behind them, between them and the scaleni, and in the intercostal spaces, which we see at each inspiration in asthmatic dyspnœa; the drawing in at the attachment of the diaphragm produces quite a constriction, and at the root of the neck deep pits are formed at the situations mentioned every time the sufferer tries to tug in the air. This phenomenon is quite inconsistent with the difficulty depending on tetanic rigidity of the parietes, and throws the *onus* entirely on defective air-supply.

3. The kind of contraction of the respiratory muscles in asthma is not that of tonic spasm, it is intermittent, regular, rhythmical, and co-ordinated. At inspiration the muscles start into prominence, at expiration they disappear. We see just the same thing in the breathing of laryngitis, and, in a less degree, in the violent breathing after strong exertion.

4. The frequency with which asthma is due to diseases affecting the air-passages, such as measles, hooping-cough, bronchitis, etc., points to the bronchial system itself as being primarily affected, and not to the nervous centres.

Lastly, although this is the least important of all the arguments, Dr. Kidd himself admits that in some instances "the disease arises very probably from spasmodic contraction of the bronchial muscles alone, caused either by the direct irritation of the bronchial muscular fibres, or through the medium of the nerves and microscopic ganglia." Now, if in some cases, why not in all? If the phenomena of asthma are in any case explicable by simple bronchial spasm, where is the necessity for calling in another system of explanations? There is always an *à priori* objection to invoking two theories to explain the same thing.

There are two or three other points of interest, suggested by Dr. Kidd's paper both in relation to the pathology of asthma and the physics of respiration, the consideration of which I must reserve for a future communication.

(To be continued.)

CASE WHERE THE FOREARM WAS TORN OFF—AMPUTATION—RECOVERY.

By WILLIAM J. COX, M.R.C.S. Eng. etc.

I was summoned, on September 10, at 7 a.m., to see J. T., aged 55, who, I was told, had just been "torn in pieces" by a steam-thresher, at work in a farm-yard closely adjoining my own residence. It seems the poor fellow had attempted adjusting the "band" without stopping the motion. I found him pale and trembling, but perfectly conscious and resolute. His left forearm, fearfully mangled, was lying at some distance, having been torn off at the elbow-joint. The lower end of the humerus protruded, perfectly bare, for two and a-half inches, the lacerated soft parts having separated higher up. I administered a little brandy, and had him carried home, a distance of about a fourth of a mile. Then, having procured the kind aid of a neighbouring Practitioner (Mr. White, of Didmarton), we amputated the limb about five inches below the axilla, about one hour only after the receipt of the injury. Only the brachial artery required tying, and the hæmorrhage was altogether very trivial. Since then the poor man has progressed favourably, without a bad symptom, and the wound is now quite healed, with a very satisfactory stump. The only point of Professional interest in the case, perhaps, was the remarkable absence of subsequent constitutional disturbance. This I venture to attribute to the early performance of the requisite operation.

Hawkesbury Upton, Gloucestershire.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

Assistant-Physician to the Metropolitan Free Hospital.

THE POPLAR HOSPITAL.

CASES OF INJURY TO THE HEAD.

[Reported by Mr. BROWNFIELD.]

Case 1.—*Fracture of the Skull with Depression—Bleeding from One Ear—Delirium—Recovery.*

(Under the care of Dr. BAIN.)

William P., a tall, thin lad, aged 15, a shipwright, was admitted on September 14, 1857, having fallen down the hold of the ship *Malabar*. He was insensible; his pupils acted; pulse 76, small and weak; skin cool. There was found on examination an evident depression of the frontal and parietal bones on the right side of the head, not very clearly defined, but about three square inches. There was bleeding from the right ear; no other wounds. His head was shaved and a cold lotion applied. A saline draught was given every six hours. In the evening he was very restless and kept calling out "Don't hurt me."

15th, 10 a.m.—He was violent this morning and during the night, by calling out loudly he had prevented the other patients from sleeping. He had not passed any water since admission, and on examination his bladder was found very much distended. A catheter was introduced. After this he became much quieter. His fæces passed involuntarily; pulse 70; skin hot; there was not much tumefaction of the scalp. 10 p.m.—His water was again drawn off; it smelt very strongly.

16th, 10 a.m.—The bleeding from the ear had stopped since last evening. It was now found that the left eye was drawn inwards very much, and that he did not open it. There was much less power in the left arm and hand than in the right. The urine was drawn off again and smelt very strongly. 10 p.m.—He was now a little more sensible and recognised his mother. His skin had about the usual temperature, and his urine and fæces were now passed voluntarily. Pulse 76.

17th.—He appeared to be more sensible. Pulse 70, and weak. He slept a great deal. He was now ordered one grain of calomel twice a-day. 11 p.m.—He was now very violent, calling out "murder," "cut my throat," etc. He tried to bite and injure himself in any way he could. A strait-jacket was put on him, and the nurse was kept with him.

18th.—He has had a very violent night, but in the morning was sleeping and quiet, and more sensible. His tongue, which had been coated and very white, was much cleaner. Pulse 70. 10 p.m.—He had taken a pint of beef-tea during the day besides his milk diet. His skin is now quite cool, and the temperature of his body much diminished. He complained of pain in the head and cramps in the left arm and hand. Pulse 68; bowels open.

19th.—He can answer questions, but soon after being roused lapses into his previous sleepy state.

20th.—Pulse 72; greatly improving.

26th.—He has gradually improved. He has now more power over the left arm, and does not sleep more than ordinary. The calomel was now omitted.

October 3.—He continued improving, and yesterday (October 2) was placed on middle diet. He was quite free from pain, and said that he felt quite well. All his senses appeared to be perfect. His pulse still being 100, he was ordered to take the middle and milk diet on alternate days.

On October 12 he was allowed to get up. His pulse had all along varied very much from 72 to 100, the slightest exertion raising it to the latter.

On the 27th he was so well that Dr. Bain discharged him.

This patient was seen occasionally up to March 7 this year (1861) about three years and a-half after the accident. He remained quite well all the time, his mind being in about the same condition as before the accident.

Case 2.—*Injury to the Head by a Fall on the Vertex—Convulsive Seizures—Delirium (Tremens?)—Recovery—Subsequent Attack of "Epilepsy" Six Months later.*

Richard J., aged 45, a shipwright. He had had excellent health, with the exception of occasional pain across the forehead. He had had two falls from a height of about twelve feet, by which he was on each occasion laid up for a short time. A third accident, for which he was at present admitted, occurred on December 13, 1858. He was at work on board a ship, and fell into the hold, a distance of twenty-six feet. He was picked up insensible, and was brought to the Hospital directly afterwards. Soon after his admission he had three severe "epileptic fits." His head was shaved, and a spirit lotion was applied. A purgative powder was given, and a saline mixture, three times a day. Three hours later sickness come on, and he rejected some of the powder. Milk diet.

On the 16th he was much the same. On the 17th a blister was applied. Eight hours after he had another "fit," and in the twenty-four hours following he had six.

20th.—Much the same. The fits are frequent, six or seven daily. Ice was applied to the head.

22nd.—Pulse a little better; surface cooler. He passed everything under him during the fits, which he did not during the first three. Beef-tea, two pints.

23rd.—He appeared weaker. Pulse still small and feeble: tongue coated. Wine, two ounces.

25th.—He passed a restless night, and kept getting in and out of bed. He wandered a great deal; the night-nurse said that he was "quite mad." This morning, however, he seemed much better. His tongue was cleaner; pulse much the same. The surface was warmer. He said that he was quite free from pain. He had not had any fit since nine p.m. of the 23rd. As he had not had any sleep for twenty-four hours half-a-grain of morphia was given, which had apparently no effect. At two p.m. two-thirds of a grain was given, and at four p.m. the dose was repeated. At six p.m. he became quiet, and at seven p.m. he was fast asleep.

26th.—He had had a good night, and this morning he appeared intelligent.

28th.—A mixture of cinchona and ammonia was ordered. An aperient of castor-oil.

30th.—To-day he seemed quite well. He had slept well at nights, and had had no delirium since the evening of the 28th. It was then very slight. He had had no return of the fits.

January 3 (1859).—He was to-day discharged well.

He called at the Hospital on the 20th; he was quite well, free from pain, and able to get about the streets. In the summer (1859) he had "an epileptic fit," and fell into a dry dock, but he sustained no injury. Mr. Brownfield again saw him six months later, and he was then well.

Case 3.—Blow on the Head—Depression of the Outer Table—No Head Symptoms—Recovery—Well Three Years later.

William P., aged 39, a shipwright, was admitted at noon of January 25, 1858. He had been struck by a large piece of timber, placed between the rams and cradle of the *Great Eastern*. The piece of timber had slipped up and struck him on the chest, knocking him down. His head came in contact with the sharp edges of a piece of timber or iron. He was picked up insensible.

When admitted he was very pale, cold, and faint, but was not then insensible, and had walked into the Hospital from the cab. He complained of pain in his chest, but not much in the head. The respiration was natural; pulse 70, and small.

On the head there was a lacerated wound of the scalp over the forehead. Under the wound was a piece of bone, depressed, about the size of an almond. The depressed part was about one-eighth of an inch below the rest of the surface. The fracture extended in several other directions, but there was no depression in any other position. No fracture of any of the ribs was detected, but a bandage was placed round it, as he complained very much of it. He was kept quiet, and a saline draught and aperient ordered. Diet—milk and beef-tea.

This patient had no further bad symptom. He recovered steadily. The pain in the chest soon passed off, and no cerebral symptom appeared. He was discharged, apparently quite well, in March, 1858.

Three years later (in 1861) he was seen by Mr. Brownfield, and still continued quite well.

Case 4.—Injury to the Head by a Blow—Insensibility followed by Delirium—Recovery after the Administration of Mercurials—Well Two Years later.

(Under the care of Dr. WEBB.)

William L., aged about 40, a robust and healthy man, fell off a pile of timber about seventeen feet high, and struck his head against a barge's side, and then fell overboard. He was immediately picked up and brought to the Poplar Hospital, March 25, 1859, at 8 a.m. He was then cold and wet, and quite insensible. There was a wound of the scalp, about two inches square, and much contused at the edges on the side of the head. Pulse 60 and small; respiration good; pupils natural. He was rubbed dry and placed in bed, and a hot bottle applied to his feet. A purgative was administered, and a saline draught ordered to be taken three times a-day. He soon, without, however, being sensible of anything that was passing around him, became very restless and excited, and an hour after admission was still worse, trying to knock himself about.

Next day (26th) he was still unconscious. His head was hot; lead lotion applied. His bowels had been well-moved by an aperient.

27th.—To-day he appeared for a short time to be a little insensible, and looked about him a little. Head shaved.

28th.—A little better. He was now quiet. A blister was applied to the back of the neck. In the evening he spoke a little, and opened his eyes.

He gradually but very slowly improved. On April 2 he was still drowsy, and would not answer questions. He now took his food ravenously. Two grains of calomel were prescribed, to be repeated every morning, and another blister was applied to the back of his neck. On the 4th, the gums appearing slightly touched, the calomel was discontinued. He was more sensible, but did not recognise a person who, before his illness, he knew well. Next day he answered questions tolerably, and from this day his progress continued to be favourable. He was so well on May 7 that he was discharged.

He was seen this year (1861) by Mr. Brownfield, and frequently in the interval, and remained quite well.

Case 5.—Fall on the Vertex—Bleeding from the Nose and the Ears—Depression of the Outer Table—Delirium—Paralysis of the Right Portio Dura—Treatment by Venesection, Mercurials, etc.—Recovery.

(Under the care of Dr. BAIN.)

John de S., a Spanish seaman, aged 27, admitted on November, 25, 1859, at eleven a.m. He had fallen into the hold of a vessel. When admitted, he was partly sensible, but being able to speak but little English, it was very difficult to make out what he complained of. There was hæmorrhage from the nose, and rather copious hæmorrhage from the ears. An irregular surface about the squamous portion of the temporal; and the parietal and frontal bones appeared slightly depressed. His pupils were contracted, and the surface very cold. His pulse was slow; it was impossible to count it, as he kept throwing his arm about. On the right side there was a large scrotal hernia, which was easily reduced. The right femur was fractured about the middle, and there was a superficial wound on the anterior and outer part. The limb was put up on a straight splint. He appeared to have some difficulty in making water, as for some time he kept crying out that he wanted to make water. He, however, spontaneously emptied his bladder. At ten p.m. he was better. His pulse was 80, but not strong; surface warm.

November 26.—His skin was hot and dry; the head and face very hot. He kept rolling his head from side to side, and putting his hands up to it. His urine was passed naturally. There was considerable swelling on the right side of the head. Five grains of calomel and one drop of croton oil were given. His head was shaved, and a spirit lotion applied. Pulse 110, stronger and even full. At two p.m. he was very drowsy, but restless. His pulse was increased in frequency. He was bled to ten ounces; this seemed to relieve him, reducing the pulse in force, but not in frequency. His bowels were well moved.

27th.—His skin was cooler. Paralysis of the facial muscles on the right side was now noticed, his mouth being drawn to the left, and the right eye remaining open. In the evening he had some cough, and there was much mucous râle. A blister was applied to the chest.

28th.—In the night he had passed his urine in bed; but this was supposed to have been through the inattention of the nurse, and not from want of control over the bladder. The pupils were not so contracted, and he appeared more sensible. The swelling on the right side of the head was not so large, but there was now a similar swelling on the other side. The face was not now distorted, but he still remained unable to close the right eye.

29th.—He was better, and he now appeared to be nearly quite sensible. He was taking his food beef-tea, eggs, etc., quite well. His pulse when counted at noon was ninety-two. He had still much cough. There was dulness at the depending parts of the chest. Four ounces of wine a-day were ordered, and a grain of calomel was given three times a-day. A Portuguese was sent to speak to him. It was ascertained that he had much pain in the chest and head. He soon got confused, and the conversation was not therefore continued.

December 1.—Cough still severe and paroxysmal. The wound was looking well. There was not the slightest evidence of depression. There was now some discharge from the right ear.

2nd.—Still improving. His urine occasionally ran from him. Omit the calomel. A blister applied to the chest.

3rd.—He looked well, and all signs of mischief about the

scalp had nearly disappeared. His cough was still very troublesome.

He continued gradually to improve, and was discharged on March 3, 1861.

Case 6.—Blow on the Head—Depression of the Outer Table—Bleeding from the Nose and Right Ear—Recovery with slight Deafness on the Right Side.

(Under the care of Mr. CORNER.)

John C. B., a healthy lad, aged 19, was admitted July 5, 1860. A very heavy weight had fallen on his head, striking the upper part of the frontal region on the right side. There was a wound about three-quarters of an inch in length on the forehead, near the junction of the parietal and frontal bones, and through this a depressed piece of bone, very small, about the size of a fourpenny-piece, could be felt. There was hæmorrhage from the right ear and a good deal from the nose. He was not quite insensible. Pulse seventy-six, and small and irregular. Breathing irregular and snoring. He vomited three times. The wound was lightly dressed, head shaved, and spirit lotion applied.

August 6.—Quite sensible. Pulse 64, very irregular, urine passed voluntarily. He vomited again this morning. Tongue considerably ecchymosed on both sides. Skin hot and dry. There was no more discharge from the ear. A saline mixture was ordered.

7th.—Pulse 60, irregular. He had more pain in his head, and his scalp was much hotter. Bowels open. Tongue furred. Six leeches were applied behind the right ear. Ice to be applied to the head.

8th.—Pulse 72, and softer. He was now free from pain, and felt much better after the leeches.

He had no further bad symptom, except a little ringing in the right ear, on which side his hearing was impaired. He was discharged well on July 31, 1860.

Case 7.—Fracture of the Frontal Bone from a Fall—No Insensibility—Paralysis of the Face—Recovery.

William H., aged 20, a tall, thin, dark-complexioned man, a labourer, fell down a ship's hold, about eighteen feet, on his head. He was admitted on July 7, 1860. Over the upper part of the right frontal bone was a wound, two and a-half inches long, leading down to the fractured portion. This end was depressed. The other end in the forehead was tilted forwards. He was sensible, but excited. He complained of great pain in the back. Surface warm; pupils acted; pulse 100. The wound was dressed, and the head shaved. Ice was constantly applied.

8th.—Pulse 92, soft, small. His bowels were relieved by an enema.

9th.—He now complained chiefly of pain in the neck, which, he said, prevented sleep. Pulse 96. Morphia (one-sixth of a grain) was given every six hours, and one-third of a grain at bed-time.

10th.—He was free from pain, had slept well, and feels much better. Pulse 88.

12th.—There was now paralysis of the face.

On the 16th he had a little pain in the head, but this passed off after counter-irritation by the tartar emetic ointment behind the ear. He continued to improve, and on July 31 left the Hospital. He was seen again on August 6. He was then quite well.

Case 8.—Compound Fracture of Frontal Bone, and Inferior Maxilla, with Hæmorrhage from both Ears and from the Nose—Strabismus; Paralysis of the External Rectus—Ulceration of the Cornea Five Weeks after the Injury—Recovery.

(Under the care of Dr. BAIN.)

James W., aged 27, admitted December 17, 1860. He had fallen a distance of twenty-five feet. He was not quite insensible. Very cold; pupils contracted, both eyes swollen and greatly ecchymosed. Over the left eyebrow was an irregular lacerated wound: a depression, but of the outer table only, could be felt. There was hæmorrhage from both ears and nostrils. He complained greatly of cold. Pulse 72, small and weak. The wound was lightly dressed, and he was placed in a fractured rib bed, his head being raised as much as possible; but being partly insensible, he soon slipped down. Hot water bottles were applied to his feet.

1 p.m.—He was more sensible. He complained greatly of cold, but the surface felt warmer. The hæmorrhage continued.

3 p.m.—Pulse 96, much more full; skin hot. The front part of the head was shaved, and three leeches were applied behind the left ear. Spirit lotion. Saline mixture every four hours.

18th.—Bleeding ceased; pulse 72, more full and very soft; scalp slightly hotter than natural; urine passed freely.

19th.—Restless through the night, but more sensible now. Ice applied to the head. Bowels freely relieved last night, by enemata, after which his pulse fell from 84 to 72.

2 p.m.—Pulse 60, but very easily raised by exertion.

20th.—He has slept well from 1 a.m. He was quiet, and answered questions readily. His head was not hot. Pulse very sensitive, the least exertion making it more frequent. It was 64, weak. Wound looks well: he looks well, says he is better, and has not so much pain.

21st.—Pulse 60, quiet. The left ear discharged a thin serous fluid, but not much.

22nd.—Strabismus. There was very little discharge from the left ear. Pulse 84.

23rd.—Both eyes squinting (convergent). Bowels well relieved. Pulse 84; free from pain.

On the 24th a blister was applied behind the left ear. On the 26th he became drowsy and heavy. There was very little discharge from the right ear. Beef-tea and eggs.

27th.—Much weaker; pulse 100. Wine ʒviij. A mixture containing ammonia and ether was now given.

28th.—Bowels relieved. Discharge from the ear ceased. Pulse 96.

29th.—Pulse 108; squinting continues. He now takes his food well.

January 1.—Pulse 112. He was now free from pain, except at the back of the head.

2nd.—He looked much better. There was little cough. The discharge from the left ear was thick, purulent, and offensive. The bowels were well relieved. Pulse 120.

4th.—Bowels much relaxed. His jaw was in bad position. The left side of the fracture was much drawn inwards. One tooth had fallen out; there was purulent discharge from the socket, and there was still purulent discharge from the ear.

5th.—There was much cough and expectoration. Blister applied to the chest.

7th.—The cough was better. He complained of much pain at the back of the neck. The squinting was gone.

January 25.—He had progressed favourably to this date, but now he does not appear so well, and felt weak. There was some superficial inflammation of the right eye.

February 1.—The inflammation of the conjunctiva has increased and it would appear as if the cornea were likely to slough. The eyelids were closed by strapping.

5th.—He appeared weaker and was scarcely able to get out of bed. He looked pale and anæmic. A mixture of quinine and carbonate of iron was ordered.

15th.—The eye was much better. There remained still, however, a superficial central ulceration of the cornea and total paralysis of the sixth nerve on the right side. He was now much improved in strength, but there was no great union in the fractured jaw. There was a piece of dead bone to exfoliate.

16th.—A further attempt was made to adjust the jaw by gutta percha, etc. etc. The right eye still closed.

He was discharged in apparent good health on April 19.

The occurrence of ulceration of the cornea some time after the injury is interesting, but unfortunately there is no note as to the sensibility of the parts supplied by the fifth nerve.

Case 9.—Fall on the Head—Bleeding from the Left Ear—Paralysis of the Left Portio Dura—Double Vision—Recovery.

(Under the care of Dr. WEBB.)

William V., aged 39, a healthy man, of temperate habits, was admitted January 3, 1861. He had that morning fallen a distance of twenty-five feet. There was on the left side a scalp wound denuding a great part of the parietal bone. It was supposed that this was produced by a plank which fell on him.

When admitted he was profoundly insensible. There was profuse bleeding from the scalp wound and considerable bleeding from the left ear. The body was cold, and pulse only 48, and small. Hot water bottles were applied to the feet; the wound was dressed; the head kept raised, and the ear was syringed out with warm water. A saline was given. At

4 p.m. his pulse was 64, but in other respects he was in the same condition.

He continued without much variation until the 5th. Paralysis of the portio dura on the left side was then noted.

There was considerable effusion under the scalp. Three leeches were applied behind the left ear. The discharge from the ear ceased on the 5th.

On the 8th Mr. Brownfield notes that his urine was passed under him. His ear was well syringed out, but there was nothing but dried blood. His nights were restless, he had no sleep, and was always muttering.

On the 9th he was somewhat more sensible, and began to take his food better.

On the 11th he was still further improved. It was found that he had double vision.

On the 12th there was a little discharge from the left ear. He now had good nights.

For many days he complained of great pain in the head. The pulse was never more than 76. He was treated by blisters and counter-irritants.

On the 18th he had very little pain, and the double vision had quite gone.

On the 21st he complained of a tingling sensation over the left side of the face, especially over the chin and cheek.

On March 4th the tingling was greater, but he had no pain. After walking about the wards the double vision would come on for a time.

He was discharged on March 9 almost free from any pain, except a stiffness about the neck. He could not turn his head round from this stiffness.

He went into the country and returned to town very much better, and is now (October, 1861) able to follow his employment as a shipwright.

Medical Times and Gazette.

SATURDAY, NOVEMBER 9.

A NEW MEDICAL SECT.

The "United Kingdom Alliance for Suppressing the Traffic in Intoxicating Liquors" has just held its Annual Meeting at Manchester. The present object of the "Alliance" is to obtain a "Permissive Bill," which shall confer on the rate-payers of any given district the power of prohibiting all traffic in intoxicating liquors within that district. We will not at present discuss the probability that such an Act will ever be obtained, although its principle is sound in theory, and the object might be partially attained by making greater use of the present licensing laws; but we may express our regret that the efforts of a large and influential Society, established for a rational and beneficent object, should be marred by alliance with doctrines that are dubious or false. Intemperance is so great an evil, that Reason says to every man, "Abstain if you cannot be temperate,—or abstain if you wish to set an example to others," even though alcoholic drinks were some of the most gracious gifts vouchsafed to man. Surely the Temperance cause is damaged by the violent and fanatical outcry that alcohol, in any and every shape, is a poison. Common sense revolts at such exaggeration.

Most of our readers are aware how vigorous and influential a body the Teetotallers have become. From a feeble beginning in America, early in the present century, the "movement" has spread all over the civilised world. In the United Kingdom there are at present three Central Associations, one of which boasts of *sixty thousand* members, and whose united incomes exceed £20,000. There is an innumerable list of minor societies, of which there are 135 in London alone, each with its President, and Secretaries, and staff of officers; and the labour and money expended in promoting the "Temperance cause" would astonish anyone who had never examined the details. Temperance people form a world of their own. There are the dignified offices of President and V. P. for the rich and titled; there are secretaryships for the active-minded; there is many a clever and fluent speaker who makes a capital income as paid teetotal lecturer; their issue of Temperance tracts is counted by the million of pages; there are Temperance hotels, Benefit Clubs, and Land Societies; and there is no conceivable method of proselytism which they do not employ for the promotion of their objects. And of those objects we are bound to speak, and do speak, with all respect and sympathy. They have set themselves to reform a crying evil, and they do much to abate it. Our own experience of their operations is not a slight nor recent one, and we know that they attract and reform many a drunkard; they give him support and encouragement; they occupy his evenings with lectures and tea-meetings, and gratify the love of excitement by flags, processions, music and oratory; and at the end they wean him from his bad habits, and he quietly falls back into the ranks of the "moderate drinkers." Whoever has health and strength, and is willing to become a water-drinker for the purpose of setting an example of temperance deserves, and always will receive at our hands, all due honour.

But, unfortunately, in the endeavour to promote abstinence from alcoholic drink, the teetotal party are in the habit of resorting to arguments contrary to all sound philosophy and to the results of experience. Not content with showing the ill effects of abuse of alcohol, they desire to show that it has no use. Fond as they are of the *à priori* argument, they would have us believe that a substance which is formed universally by a spontaneous change in every vegetable article of food and drink, is totally useless and pernicious; for whilst some of the more moderate teetotallers allow the use of it as a medicine, the more extreme set denounce it in every form as an absolute and unmitigated poison.

Of course, when they venture on ground like this, they are sure to come into conflict with the Medical Profession. And the extreme teetotallers have always bitterly denounced us as the inveterate foes of temperance. We need not say that they denounce us unjustly. We have the responsibility of other people's lives on our shoulders; and we cannot let people die, nor refuse to prescribe alcoholic drinks, when we know they will save life, because they are abused by some persons. It is not likely that a practical man will be influenced by the question, whether alcohol shall be called food or physic. There is many a drunkard who says he is "ordered" by his Medical attendant to take an excessive quantity of stout, or brandy-and-water, and who lies against us to palliate his own guilt. But there is no doubt that we do habitually prescribe a measured quantity of fermented liquors to persons in dangerous illness and in imperfect health, and we know that by so doing we give them one tried means of restoration to life and health. But this is highly offensive to the extreme teetotallers. All their tracts teem with abuse of the Doctors. It is not enough that a man may be a water-drinker, he must also profess that alcohol is poisonous. Any member of our Profession is eagerly welcomed as a convert. They have had for some years on their side the respectable names of Dr. Carpenter, of Dr. Lees, a most learned though partial commentator on the Bible; and of Mr. Higginbottom, the venerable Surgeon of Nottingham, well known by his monograph on nitrate of silver, who has published some tracts, in which he assures us that he has not prescribed any alcoholic drink for many years. There are too some worthies of less note who advertise the cure of any disease on total abstinence principles. But whoever reads temperance books, and the reports of temperance meetings, must be aware that if threats and blandishments are of any avail, we are likely to see the

establishment of a new Medical sect, with Anti-alcoholism as their motto.

The cardinal doctrine of the sect is, that alcohol is not food, but possibly medicine, and certainly poison; and as the logical consequences of such a doctrine are rather more extensive than the promulgators of it seem to think, it may be as well to examine it a little before we give in our adhesion.

We have all heard of Martinus Scriblerus's attempt to construct the abstract notion of a Lord Mayor apart from the gold chain, the coach, the mince pies, the City, and the Aldermen. Equally absurd is it to form the notion of food, medicine, or poison as absolute terms. Nothing can be dreamed of by the human mind as food, or medicine, or poison, unless there is something in existence which can be fed, medicated, or poisoned. No more could the conception of a horse-shoe be possible if there were no such thing as a horse. These terms, therefore, must be relative; and must be given, not according to the quality of the agent, but to those of the person acted on. Is conium a poison? Certainly to man, but not to the goat. Cantharides is poison to man, but food to the hedgehog; and quassia, which is medicine to man, is poison to flies. There have been, it is true, many attempts to establish an inherent difference between medicine and food. Medicine, it has been said, differs from food in not being digested and transformed; or, in being eliminated. But Liebig (a), years ago, put the matter in a clear light. He showed that food, strictly speaking, does not exercise chemical action on the living organism; that medicine does so, to the effect of modifying the functions; and that poisons overpower the vital forces, and retard or arrest the motions of the organism—but that the main difference is one of *quantity*, which is equivalent to superior affinity; hence that food or medicament may be poisonous if administered in excessive quantity, and poisons, in small quantities, be medicinal. We might appeal to that proverb in which the results of long experience are concentrated: that what is "one man's meat is another man's poison," but the transactions at any family dinner-table suffice. The cayenne pepper which the old man eats to the comfort of his stomach, might derange a young man and poison a child. It is, in fact, impossible to draw any line of demarcation absolutely between food, medicine, and poison. If it be said that those substances only are food which undergo decomposition into the constituents of urine and carbonic acid, or which exist in the form of the animal and vegetable nitrogenous and non-nitrogenous aliments, we reply that man cannot live on these alone. All attempts to live on monotonous dietaries, which exclude the stimulant or condiment, or non-nutricious and medicinal or poisonous adjuncts, are failures. Appetite gives way to loathing; diarrhœa sets in, and if there be no change, death follows. Salt, onions, water-cresses, salt fish, pepper, and mustard are all rather medicinal than nutritive, but without some of them the most theoretically perfect nitrogenous and non-nitrogenous diet will not maintain life. Some men must take acids, some aloes, some various saline compounds, or bitters, or stinking oils, or alkaloids, or they lose their health. In fact, as a perfect food should be a daily medicine, just so medicine is an extraordinary food. If any one denies the name of food to stimulants and condiments, let him try and live without them, and then tell us how that can be called food on which a man *cannot* live.

But the teetotallers tell us, "Poison is the name of an intrinsic *quality*, and has no reference whatever to quantity, quantity being only considered in regard to the extent of its poisonous effects. *Food* and *drink* are not *poisons*, and poisons never can be food or drink in the true meaning of the terms. To hear men, then, who ought to know better, speak of them in reciprocal terms, betrays a pitiable ignorance of, or duplicity in, the logical definition and nature of the things indicated." So says Dr. James M'Culloch, of Dumfries, and we quote him in order that our readers may be fully aware of the logic and mental sobriety of the new allies whom they are tempted to join.

Another teetotal dictum which we find laid down is that all "remedies" are hurtful to the body in its natural state, for if they were not so, they would not be remedies at all. "Remedies produce, and are given to produce an abnormal action." Of course the Homœopaths clap their hands at such an announcement, inasmuch as it endorses the offensive and degrading term *Allopath*, which Physicians have always repudiated, and which implies that we create one disease to cure another. We always thought that medicines were given to excite a normal action; and that whether we give a dinner pill to the sedentary student, or a pipe of tobacco to the man who cannot compose his thoughts, or opium to him who cannot sleep, or green tea to him who cannot keep awake, or a vapour-bath to the hidebound, that we were but assisting Nature to do what she would do for herself if she could. There is great concord between Homœopathy and Teetotalism in this doctrine concerning medicines, as in some other points.

The teetotallers again eagerly embrace any new scientific doctrine which gives them any support. Of course, they are enchanted with the experiments of MM. Lallemand, Perrin, and Duroy, which we communicated to our readers last January, and which tend to show that alcohol is eliminated from and not changed in the animal economy. We can only repeat our caution as to the slippery nature of experimental physiology. More than one doctrine built on that foundation has been abandoned, and it may be the same with the elimination of alcohol. No experiments have proved the elimination of any quantity of alcohol. And if they did, what are such experiments to the daily experiments each of us makes in his own eating and drinking?

If any one, then, abstain from alcohol for health, or discipline, or example, well. But if he abstain because it does not come within his definition of food, or because it is eliminated, he ought, to be consistent, to test other substances by the same rule. Besides water, common salt, and phosphate of lime, besides creatine and creatinine, which are found in soup and pass into the urine, there is an abundance of medicinal substances employed with our daily food, but constituting no part (as is commonly believed) of the normal human body, and wholly or in great part eliminated unchanged. In fact, elimination seems the rule with most substances of the alkaloid class, though it has not been demonstrated with all. Each of these substances, too, is capable of causing morbid symptoms in some healthy persons. What are we to say of carbonic acid, that most natural and exhilarating accompaniment of alcoholic fermentation—(the two going together inseparably in nature, and furnishing a compound most grateful to stomach and brain)—what are we to say of tea, coffee, tobacco? How shall curry-powder be classed? If a rule is worth anything, pray let us have the full benefit of it. If no man in health ought to make "medicine" part of his diet, he will have to give up a great many small luxuries.

But the fundamental error of the teetotal advocate is that of looking away from matter of fact, and resorting to the feeble, pedantic, *à priori* style of argument, in a matter which ought to be dealt with by demonstration and experiment. While some persons abstain, and are the better, or no worse, the daily experience of most conscientious and abstemious persons proves them to be the better for an habitual allowance of fermented liquor. Whether it be food or medicine, eliminated or transformed, whether it ought to do good

(a) "Chemistry of Agriculture," etc. Second Edition. P. 377. London: 1842.

or not on reasonable grounds of argument, are questions little to the purpose. It does virtually comfort the stomach and give quiet to the brain, and enables hard-working and anxious men to work better and rest better. That it lifts up the sick from the very doors of death, must be palpable to everyone who has seen a case of flooding; and that it is greedily swallowed in immense quantities by patients during exhausting illnesses, who *feel* its beneficial effects, is indisputable. With these facts before us, it ill becomes a practical Profession to be coquetting with the sophistries of the teetotallers. We do not want to become slaves to definitions, nor to resort to scholastic subtleties when we deal with matters so important as life and death.

THE WEEK.

We trust the attention of our readers was directed to an announcement made last week in our advertising columns, to the effect that a subscription had been set on foot for the benefit of the four boys left by the late respected Professor Quekett. Few men were so ready to assist the members of our Profession in their microscopical difficulties, or more willing to give them good advice on matters connected with his department of science. Seldom a day passed without a portion of the late Conservator's time being devoted to the examination of various morbid structures for his Medical friends. Those of us who have the power will surely second the efforts of the *Working Committee*. We may remind our readers that Professor Quekett, about five years ago, succeeded Professor Owen as Conservator of the Museum of the Royal College of Surgeons. Almost ever since he obtained this appointment his health was so bad that he was unable to insure his life, and before this time his income (£300) was too small to enable him to do so. He died at the early age of 46, and leaves a widow and four sons. The effort which has been set on foot has for its object the collection of a sum of money for the purpose of starting the four boys in the world when their school education is completed. It is intended to invest the money in the hands of trustees until the boys arrive at an age to require it. The following gentlemen have formed themselves into a Working Committee for the above-mentioned object:—Professor Owen, the Hon. and Rev. Lord S. G. Osborne, Dr. Bence Jones, Professor George Busk, Frank Buckland, Esq., and Dr. Lionel S. Beale, of King's College, London, is Honorary Secretary. Messrs. Twining, bankers, 215, Strand, will also receive subscriptions. We feel sure that the facts we now lay before our readers will suffice, without any appeal from us, to plead the cause of the "fatherless and the widow" of our departed brother.

We give the following letter entire, because it relates to a social nuisance which requires to be checked: it describes what is (if correct) a very questionable mode of advertising a public Institution; and it is a good example of the playful and gentlemanly, as distinguished from the churlish style of correspondence. It should be observed that by the "Orthopædic Hospital" is meant the "City Orthopædic Hospital," in Hatton-garden:—

"TO THE EDITOR OF THE TIMES.

"Sir,—I received this morning a huge official envelope, which had followed me hither from my house in London, *viâ* Paris and Vienna, bearing on its left-hand corner the well-known autograph of 'Russell,' and edged with a broad black border, clearly indicative of the grave loss which the noble House of Bedford has unhappily sustained. I had to pay 15s. postage for it.

"My heart beat when I opened it, for I anticipated, at least, that Earl Russell was about to appoint me Vice-Consul at Patmos, or Envoy Extraordinary to the Gaboon for the purpose of sifting the great gorilla question. I did not, therefore, grudge the 15s., especially when I found among the contents of the envelope a letter in Lord Russell's own handwriting, addressed to me, and beginning 'Dear Sir.' Indeed, I augured the very best from such delightful familiarity—all the more delightful from the fact that I had never previously had the honour of any communication, either oral or written, from his Lordship.

"I was, however, speedily undeceived. The 'Russell' on the envelope, as well as the letter beginning 'Dear Sir,' proved on close examination, to be lithographed imitations, admirably executed, of Lord Russell's handwriting; and the object of the letter was to inform me that he, Lord Russell, having consented to preside at the annual dinner of the Orthopædic Hospital on the 20th of November, earnestly hoped that he should have the pleasure of meeting me—an utter stranger to him—at that festival.

"The other contents of the envelope, which weighed several ounces, consisted of horrible sketches of club-feet, bandy-legs, distorted toes, knock-knees, and wry-necks, in their original state, and in their improved condition after treatment at the Orthopædic Hospital; and there were several printed forms, apprising me of the terms in which it would be desirable that I should leave a legacy to the Hospital, with a suggestion that, if I did so, the legacy duty had better be paid out of my estate. There was also an envelope addressed to the Secretary of the institution, intended to convey to that official my acceptance of Earl Russell's agreeable invitation.

"I can hardly suppose that this trick has been practised with Earl Russell's knowledge and sanction, but I do think that it is a most unwarrantable use to make of his distinguished name. The envelope was carefully prepared to look as like an official envelope as possible. The lithographed 'Russell' in the corner might well deceive my servants, and entirely justified them in forwarding the documents to me regardless of the cost; and the result is that I have been mulcted in 15s. postage, without any possibility of compensation, unless, indeed, his Lordship, conscience-stricken, should, on my return to England, substitute for it a dinner invitation of a more practical and agreeable nature.

"I beg you, Sir, to publish this letter, and so prevent a recurrence of the practice.

"Your obedient Servant,

"Constantinople, October 20." "L.

Our Winchester correspondent describes that ancient city as being situated on the opposite slopes of a valley, with a river, divided into several brooks, running along through the lowest part of the town. We are told further, that the County Hospital, and a large portion of the dwellings of the lower orders, together with the Cathedral and College, are situated quite in the bottom of the valley, and a very little, if at all, above the level of some of the watercourses. We learn that there is no general or organised system of drainage; there is a new system of waterworks, it is true, which supplies the lower part of the town with excellent hard water from a well in the chalk, but that the drainage is very imperfect. Part of the town discharges its sewage into a languid stream, which runs near the walls of the College, but a greater part is provided with cesspools, and in many cases cesspools are excavated in the chalk, for the purpose of receiving water-closet drainage, close by other wells in the same chalk, whence the water supply of private houses is obtained. The County Hospital is situated in a swampy flat, and is not drained at all; but there is a huge cesspool in the garden covered with a charcoal apparatus, which, it is hoped, decomposes the offensive gases which arise and pass through it. If it were drained under present circumstances, the only outlet would be into one of the brooks which pass through the town, and give their name to many of the streets, and which would become poisonous ditches. We are told further that Winchester has been at times visited by cholera, and that twenty years ago there was a fearful visitation of fever at the County Hospital, which carried off many of the inmates. It cannot be wondered at that the Medical men and chief inhabitants desire to see a thorough system of drainage

established, which shall preserve the brooks from sewage contamination, and provide an artificial channel through which the liquid manure shall be carried to the extensive meadows in the neighbourhood, where, judging from the price of fresh butter and green forage, its beneficial effects are much to be desired. We are told that the Dean and Chapter, the Wardens and Fellows of the College, and the Government on behalf of the Barracks are all willing to come forward liberally, and that the *clean party*, as Lord Palmerston once called it, comprises the principal inhabitants, in trade and out of trade. Nevertheless, there is another party, which raised the old cry of expense and confiscation, and it is using every effort to return Municipal Counsellors, who will vote against drainage. We might be content to let them wait till another cholera year, were it not that the innocent would suffer with the guilty. We are told that £17,000 have already been invested in the waterworks, and that a further sum of £12,000 only is required. The Hospital is to be removed to a larger and more airy situation.

Who does not enjoy a good mealy potato? But then, how are they to be selected, for in the uncooked state they all look alike to the unpractised eye? Mr. James Anderson, a practical dealer, has answered this question in a way which is illustrative of the advantages which would ensue to working men and tradesmen if they would learn a little science, and so reduce to rule what they now do by guess:—

"The finest, mealiest, and most nutritious potatoes are always denser and heavier than the soft and waxy. By taking advantage of this difference in their specific gravity, the light and inferior potatoes are made to swim on the surface of a solution of salt, while the heavy and good sink to the bottom. By this simple contrivance, the dry and mealy potatoes are separated from the soft and waxy in the most effectual manner, with the most scientific exactness, and by a process which cannot err.

"The specific gravity of potatoes varies from 12 to 25 degrees of the common hydrometer. Potatoes having a gravity of from 12 to 14 deg. are very inferior; 14 to 16 deg. are rather inferior; 16 to 18 deg. are middling, not bad; 18 to 20 deg. are good; 20 to 22 deg. are fine and floury; 22 to 25 deg. are the very finest.

"Potatoes at 25 deg. contain twice as much nutritious food as those at 12 deg.; and seeing that the heavy potatoes are also the whitest, the most floury, the most agreeable to eat, the most wholesome, and most easily digested, their superior value must be at once appreciated."

Potatoes of the lowest gravity (15 deg. by Twaddell, corresponding to about 1·075) contain, according to Dr. Hassall, 20 per cent. of solid matter, and those at 25 deg. Twaddell (or, 1·125) contain nearly 32 per cent.; therefore, even supposing that the ripe and bursting mealy potatoes were no *nicer* than their waxy, watery brethren, they would be worth half as much again, owing to their proportion of solid matter.

A child has died at Witheral, near Carlisle, from the effects of a dose of strychnine, administered by the Medical attendant in mistake for santonine. The label on the bottle was illegible, because the rain had found its way into the Surgery. In another column we print a letter from an esteemed correspondent, who makes too sweeping a charge against country Practitioners for the state of their dispensing apparatus. There is, doubtless, room for improvement in some cases.

A CORRESPONDENT warns us against a man who is in the habit of plundering authors by applications like the following:—"J. B. presents his compliments to ——— Esq., M.D., and respectfully desires he will forward him, per post, two copies of his work "On ———," with price of the same, including postage.—25, ——— Street, ——— Road, Manchester.—October 1." The writer of this epistle is well-known to the Manchester police.

REVIEWS.

Epilepsy: its Symptoms, Treatment, and Relation to Other Chronic Convulsive Diseases. By J. RUSSELL REYNOLDS, M.D. Lond., Fellow of University College, Fellow of the Royal College of Physicians, Assistant-Physician to University College Hospital, etc. Pp. 360. London: 1861.

THIS book, from the pen of Dr. Russell Reynolds, will establish his high reputation as a philosopher and a Physician. Conscious as all of us must be that, under the name of epilepsy, and embraced within the well-known definition of that disease by Celsus, are included a large number of cases where the most varied forms of organic lesion exist; and on the other hand, that cases are included in which no such structural alterations are to be detected, either during life or after death, Dr. Reynolds has, and we think rightly, selected the latter class as that which, first of all, demands the attention of the scientific inquirer. These are cases of "idiopathic" epilepsy. In studying this malady, the Author has availed himself of the legitimate aids afforded by what has been termed the "numerical" method of investigation. While using it, however, he takes especial care to satify his readers that he is quite aware of the serious errors to which its abuse is liable to lead its devotees; and a large portion of the preface to the volume is occupied in a philosophical limitation of its range. He writes:—

"Statistics do but deal with imperfect knowledge; they register so-called 'exceptions,' which are either ignorances or errors; and they also point out the direction in which truth yet concealed may be discovered; but the object of scientific investigation is, not to rest satisfied with this recognition of an exception, but to find out its cause; not to stop where we have gained only some glimpse of the position of truth, but to advance, as far as possible, to the possession and appreciation of it all. Towards the realisation of this end the numerical method may be our most trustworthy guide; but statistical results are not the end itself. The truth we seek is not to be expressed by per-centage, but by terms which are as absolute as truth itself."—Preface.

The basis on which Dr. Reynolds then stands forth before the Profession, on which he demands a hearing as an "interpreter of nature," is the accurate observation and analysis of eighty-eight cases of idiopathic epilepsy—cases in which he could find no evidence of any other affection, and to which, therefore, no other name than epilepsy could be applied. And we must confess, after reading the volume, that we are profoundly impressed with the care and labour with which these cases have been observed and analysed.

The structure of the book is pretty well such as might have been anticipated. It is divided into seven chapters, the first of which is introductory to the pathology of nervous disease. The succeeding chapters refer respectively to the definition and Nosological Position of Epilepsy, its Symptoms, Natural History, Pathology, Diagnosis, Prognosis, and Treatment, the whole concluding with a valuable bibliography and index. As it will of course be out of our power to present our readers with anything like a detailed account of so elaborate a work, we shall content ourselves with opening the book here and there, and presenting them with a few of Dr. Reynolds' more important deductions, as far as possible, in his own words. And first with respect to the relation of epilepsy to disturbances of the mental faculties, the following is a *résumé* of the Author's results:—

"1st. That epilepsy does not necessarily involve any mental change. 2nd. That considerable intellectual impairment exists in some cases, but that it is the exception, and not the rule. 3rd. That women suffer more frequently and more severely than men. 4th. That the commonest failure is loss of memory; and that this, if regarded in all degrees, is more frequent than integrity of that faculty. 5th. That apprehension is more often found preserved than injured. 6th. That ulterior mental changes are rare. 7th. That depression of spirits and timidity are common in the male sex, but not in the female; that excitability of temper is found in both."—P. 46.

The author thus sums up the relation which exists between the mental, motorial, and organic functions, in regard of the

deviations they present in epileptics. "In 12·6 per cent., there could be discovered no deviation from health, *i. e.*, that eight individuals were found who, in respect of mind, motility, and organic condition, did not differ from the ordinary mass of humanity, and presented, in the interval of their attacks, no symptom of disease. But 82·7 per cent. exhibited some degree of deviation; and therefore we must regard it as the exception, and not the rule, for the epileptic to appear in perfect health. Again, of these 82·7 per cent., there are 61·9 who presented deviation from the first to the third degree, and but 25·3 who exhibited it from the fourth to the sixth. Hence epileptics moderately or slightly impaired in health, are more than twice as numerous as those whose condition is more seriously damaged."—P. 80.

There is one symptom in a paroxysm of epilepsy, which, because they have not had an opportunity of observing the seizure from the first, is by many Medical Practitioners believed not to exist. We refer to pallor of the countenance, the importance of which lies in the bearing which it has been supposed to have upon the pathology of the paroxysm. Its occurrence at the very outset of the paroxysm has not, however, been overlooked by competent observers, among whom may be mentioned M. Trousseau and Brown-Séquard, and some recent writers among ourselves, as Dr. Radcliffe and Dr. Sieveking. Brown-Séquard, indeed, mentions pallor as more or less constantly present at this period, and Dr. Radcliffe has noticed it in all the instances (twenty-one) in which he has seen the fits from the very beginning. Dr. Reynolds says that his experience is by no means so uniform; he says, "I have watched attacks from the very commencement; they have occurred while I have been looking out for them, but they have come on without any change of colour until the facial muscles were distorted, and then a dusky flush has appeared. I can therefore speak confidently of the absence of pallor in some instances; whereas in others it has been sufficiently obvious, not only to attract my own attention, but that of the friends of patients." From a table of forty-five cases which he gives, "it appears that pallor was observed in but little more than one-fourth of the cases; and either darkness or no change in nearly three-fourths. And further, that pallor is much more frequent in the female than in the male sex, the numbers being respectively 33 and 20 per cent."—P. 110.

But one of the great points of debate, and, after all, the most important to have settled, is the pathology of the disease, and especially the pathology of the paroxysm. It is not long since we laid before our readers the views held by one great master of our art, whose name we have already mentioned upon this question. The following extracts (for we cannot quote them in full) will enable a judgment to be formed as to how far Dr. Russell Reynolds and M. Brown-Séquard agree in their views on this subject:—

"Dividing the paroxysm into three stages, we have to encounter the simultaneous development in the first stage of six symptoms.

"1. Loss of consciousness, or of volition and perception, is due at this period, as has been already shown, to the arrest of vascular supply by spasmodic contraction of the cerebral vessels.

"2. Tonic contraction of the muscles, extending from those of the face to the neck, trunk, and extremities, is the direct expression of undue action in the medulla oblongata, passing downwards to the spinal cord.

"3. Arrested respiration may be induced by one or both of two causes—either spasmodic closure of the glottis, or fixation of the chest-walls and diaphragm. That the former is not of so much importance as was thought by Dr. Marshall Hall has been proved by the results of practice upon his own suggestion, viz., that of tracheotomy for the alleviation of the malady.

"4. Pallor of the face, or duskiness; or the former succeeded by the latter. . . . The phenomenon (pallor) is of the same character in its causation as the loss of consciousness; it is not of the nature of paralysis, inaction, or atony, but of spasm. . . . Duskiness of the face, when occurring at the onset of an attack, is probably due to 'trachelismus,' as originally suggested by Dr. Marshall Hall.

"5. Dilated pupil is caused, in the manner already described, through the sympathetic nerve. Bernard has shown how it arises on galvanising the upper end of the great sympathetic after division. It is thus—like pallor—the result of over-action, from undue stimulus; it is not the product of paralysis or diminished sensibility.

"6. The radial pulse is weak or imperceptible; and this may be from tonic spasm concealing it at the wrist, or arresting it at the shoulder by the forcible throwing backwards of the arms. . . . But the action of the heart may be arrested, and this by contraction of the chest-walls, as proved by Weber; or by either reflex or direct action on its own nerves. . . . Arrest, therefore, of both pulse and heart is the result, not of inaction, but of either muscular over-action or of augmented innervation."—P. 267.

The explanation of the phenomena of the second stage of the paroxysm is as follows:—

"1. Loss of consciousness persists; but it is not due to anæmia of the cerebral hemispheres. There is now venous congestion of the brain. . . . Further, the blood is carbonised, and incapable of maintaining the cerebral functions.

"2. Clonic convulsion is the consequence of the circulation of carbonised blood; it is a phenomenon of asphyxia.

"3. The laborious respiration and tracheal gurgling are obvious effects of asphyxia previously induced by tonic spasm.

"4. Of the same nature as the laborious respiration is the palpitation of the heart and throbbing of the arterial pulses.

"5. The state of the iris varies. Its spasmodic dilatation ceases at the end of the tonic stage. Its condition changes during the clonic. Commonly it is of moderate or medium size; occasionally it oscillates from extreme contraction to marked enlargement; and these changes we must attribute partly to the condition of the tubercula quadrigemina and partly to that of the sympathetic at its junction with the cord. The contraction or dilatation would be determined, *cæteris paribus*, by the prevalence of irritant black blood in the former and the latter respectively.

"6. It is during the clonic stage that the contents of the bladder, rectum, and vesiculæ seminales are discharged, and that profuse lachrymation and salivation occur. These phenomena belong to one category. There is nothing to prove that there is any increase of secretion. The phenomena are due to pressure upon the ducts. . . .

"The symptoms present during the *third* stage of an attack resolve themselves into those of the second, only modified by the partial return of sensation, perception, and volition. . . . The after stage of 'stupor,' when this exists, is one of exhaustion and partial paralysis."—P. 273.

For the purposes of treatment, Dr. Russell Reynolds throws patients into four groups. In the *first* group he places those whose mental faculties and general health are unimpaired, and who exhibit no striking alterations of mobility. These he regards as incomparably the least tractable. "Diet, regimen, and counter-irritation are of more value than medicine, for in regard to the latter we are more or less shut up to those drugs which are supposed to exert some sort of specific influence, such as oxide of zinc, etc. In a *second* group I would place those cases the prominent feature of which is mental incapacity; and for their treatment the measures already described will, I think, be found most serviceable." These include mental exercise *without strain* and occupation.

"The *third* class consists of those whose general health is impaired, and who require various kinds of management. If there is anæmia, with cold extremities, generous diet, warm stimulants, and iron are the most valuable of our aids. Quinine or cinchona bark may be added if there is general feebleness. The digestive and secretive functions, together with the excretive, require the first attention in other cases; whereas in some uterine derangements necessitate correction. To attend to these points is of more utility than to administer so-called 'anti-epileptics.'

"In a *fourth* group there are evidences of exalted irritability of the nervous centres, and these demand the first attention. The various sedatives enumerated in the early part of this chapter (opium, morphia, conium, hyoscyamus, belladonna, etc.,) may be given, and with most marked improvement."—P. 344.

This is one of those works which, with Louis on Phthisis, Walshe on Cancer, and others issuing from the numerical school, will take its place in the standard literature of European Medicine.

On the Parasitic Affections of the Skin. By T. McCall Anderson, M.D., Fellow of the Faculty of Physicians and Surgeons, Physician to the Dispensary for Skin Diseases; Physician to the Deaf and Dumb Institution, Glasgow, etc. Pp. 152. London: 1861.

The substance of this volume appeared lately, in the form of a series of articles, in these columns. The practical character of the work and the terseness of its style do not require, therefore, any commendation from us. It is a book which will be acceptable to the Profession.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

GERMANY.

Dantsic, September 20.

A TRIAL FOR MALAPRAXIS.

The trial of the Chief Physician to our Town Hospital, Dr. Stich, for malapraxis, which came on here in July last, has excited so much interest in all parts of the country, that I am induced to give you a short account of it. In November, 1858, information was given to the public prosecutor that a patient named Lemke, who was then in Dr. Stich's wards, had fallen ill in consequence of gross ill-usage on the part of his employer. On being examined the patient said that he had been quite well previously, and that his present disease was entirely due to his having been severely beaten about the elbow and the hip by his master. The day after he had made this deposition the patient, in whom amputation of the arm had been performed by Professor Pohl, died, and the Public Prosecutor then requested to be furnished with the history of the case both by the Physician and Surgeon. Dr. Stich mentioned that the statements of the patient were not to be relied upon, as they were very contradictory, and that no trace of external injuries had been visible on his entrance into the Hospital. The disease had at first appeared to be acute rheumatism, but after a while a swelling on the hip and elbow began to show itself, which soon increased; fluctuation was perceived and an incision made, after which caries of the bone was discovered to be present. Perforation and further destruction of the elbow-joint had necessitated amputation of the arm, but death had, nevertheless, taken place. The case was one of multiple dyscratic inflammation of the bones, and had been entirely unconnected with external injuries. The Surgeon, on the other hand, contended that death was due to the external injuries received. Witnesses were now brought forward who said that the patient had already had swellings on the hip and elbow at the time of his reception in the Hospital, and that the swelling on the hip had not been opened with the knife, but had burst spontaneously. As other witnesses stated the exact contrary, public opinion remained undecided; not a few openly asserted that Dr. Stich had been guilty of neglect in the treatment of the case; while others believed him to be the victim of personal malice, especially as the Judge who was appointed to hear the case took open part against Dr. Stich.

In the meantime the Royal College of Medicine of Königsberg has been requested to give its opinion on the following points:—1st. Whether the local disease and, therefore indirectly, the death of Lemke had been caused by a dyscratic disorder or by external injuries; and, 2nd, Whether a supposed neglect on the part of the Physician of the Hospital had been instrumental in bringing about a fatal issue. To this Professor Wagner, of Königsberg, who acted as referee on this occasion, gave the reply that external injuries, and not a dyscratic disorder had caused death to take place, and that the patient had been negligently treated; although there was not sufficient evidence to show that this had contributed to the fatal result. The adversaries of Dr. Stich now raised a triumphal shout; but in the commencement of 1860 a pamphlet was privately distributed by Dr. Stich, in which he commented upon the case in question and the opinion of the Königsberg College; and in which the author showed himself not only a scientific Physician, but also a very brilliant writer. He certainly struck a chord in every Practitioner's heart by exclaiming that if the Königsberg College were allowed to attack the Professional doings of a Physician upon such slender grounds, and in this manner to undermine his very existence, the Medical Profession of this province would see other and stranger things come to pass. The opinion of the Königsberg College was now so vehemently assailed from all sides, that the Public Prosecutor at last requested the opinion of the Scientific Deputation of Berlin, the highest Medical authority in the kingdom; but, as the Berlin referee was believed to harbour hostile feelings against Dr. Stich, public opinion was proof against any such scientific opinions, and inclined more and more in favour of the latter.

After these rather extensive preliminaries, the trial of Dr. Stich for malapraxis at last commenced on the 7th of July last, before the Criminal Deputation of the City Court of this town. The prosecution went to prove—1st. That a wilful false statement concerning the health of a person had been made to the authorities; 2nd. That the Medical College of Königsberg had been insulted and calumniated in its official capacity. As the statements of the witnesses were perfectly contradictory, it became a trial of strength between defence and prosecution. The Public Prosecutor was dull and tedious; Dr. Stich's reply, on the other hand, was very able, and the prosecution was demolished before Dr. Stich's counsel had spoken. The verdict of the Court was another illustration of Horace's

"Parturiunt montes, nascetur ridiculus mus."

The first point of the prosecution was declared to be void, and for the second a small fine was imposed, which was, however, afterwards remitted, in consequence of the amnesty given on the occasion of the accession of King William I.

Wiesbaden, October 6.

WIESBADEN SPRINGS IN ANOMALIES OF MENSTRUATION.

The manifold disturbances to which the catamenia are subject cannot surprise us when we consider the morbid influences which are perpetually at work upon the sexual system of women. The periodical hyperæmia of all the generative parts, which accompanies the periodical maturing of ova, is in itself a normal physiological process. But the sexual organs in women have a more powerful and immediate influence upon the whole system than in man; and just as various disturbances of the general health are caused by, and come on during, menstruation, so, on the other hand, diseases of remote organs, dyscratic disorders, etc., in their turn easily disturb menstruation. The following are a few of the observations of the Ober Medizinalrath, Dr. Müller, the most experienced Physician here, on the influence of the thermal springs of this place upon various anomalies of menstruation:—

1. *Dysmenorrhœa.*—Amongst patients of this kind, forty-six women suffered from painful and twenty, from scanty menstruation, under symptoms of general sur-excitation of the system. In some of those cases in which manual exploration, or the introduction of the speculum was allowed, Dr. Müller found residua of old puerperal metritis; in others an inflammation of the cervix uteri, with intumescence and sensitiveness to the touch; or the same state in one or both ovaries and in unmarried females, and swelling of the whole uterus, consequent upon inflammation. In one case of this kind the catamenia entirely disappeared for several months after the first use of the waters; they then returned, and became regular, but were very scanty and painful; at the same time a paraplegia of both extremities came on. The patient remained here from the beginning of one summer to the end of the next summer, using the waters continually during that time, at the end of which the menstrual function was entirely re-established, the local swellings disappeared, and the power of walking recovered. This patient afterwards married, and in due time became the mother of a healthy child.

In other cases of dysmenorrhœa nothing but chronic vaginitis could be found, or disturbances of circulation in the parenchyma of the uterus, caused by cold injections, which had been made for alarming hæmorrhage in the puerperal state. The menstruation was also scanty and painful in several sterile women. In some of these eclamptic convulsions came on after manual exploration. In such cases the springs were sometimes slow in their effects, but almost invariably beneficial.

2. *Menorrhagia.*—Cases of abundant menstrual discharge, which came under Dr. Müller's care, were sometimes con-

nected with chronic dyscratic disorders, rheumatism, and rheumatic gout. Others were caused by atony of the sexual organs, soft swelling of the womb, and prolapsus vaginæ. Most of these patients also suffered from anæmia. Some had had frequent miscarriages, or suffered from tumours of the liver and spleen. With the exception of hæmorrhage in newly-married women and in carcinoma uteri—in which, of course, the springs could not be expected to be curative—the waters were, if cautiously used, and combined with mild aperients, of most decided use to the patients.

3. *Amenorrhœa.*—Cases of this description were mostly due to parturition, as the catamenia did not return after the last delivery, and congestion, irritation, and swelling of the uterus came on in consequence. Cold fomentations which had been made for strong metrorrhagia were also often the cause of the cessation of the menstrual flow; likewise inflammatory catarrh of the vagina and the uterus. In a few cases paralysis of both lower extremities, and in one, anæsthesia of the arm, also existed. In one case excessive drinking of vinegar during menstruation had caused the catamenia to disappear. In all these cases very good results were obtained by general and local baths, combined with the drinking of Kochbrunnen. If considerable congestion existed, an aperient cold mineral water was administered internally. In one case disappointed affection was the cause of the cessation of the menstruation, which was speedily followed by catalepsy. A few baths restored the lost catamenia, and the catalepsy then disappeared at the same time.

Many cases of pruritus genitalium, which is so frequent and troublesome during the period of involution, have been observed here, but they are very difficult to cure. Such patients have generally used all other means before they come here, and they only improve by the use of baths, injections, and the use of aperient waters.

On the whole, the frequency of Wiesbaden has during the last twenty years been continually on the increase. In 1847 the patients numbered 14,000. During the political storms of 1848 they fell to 8000, and in 1849, when revolution was everywhere, they did not exceed 7950; but in 1850, when "order had been restored," the number again rose to 13,000; in 1852 to 20,000; and in 1854 to 25,000. In 1855 the number again fell to 21,000, but rose again to 28,000 in 1858, while in 1860 they amounted to 25,940. Amongst these were 145 foreign Physicians, who came here for the purpose of inspecting the springs and bathing establishments.

ITALY.

Rome, September 26.

DYSENTERIA IN INFANTS.

In my last letter I mentioned that an epidemic of dysenteria in infants occurred here this summer, immediately after the commencement of the great heat at the end of June and the beginning of July. It mostly affected children of the first and second year, who were still at the breast or already weaned; but also a few who had finished the first dentition. (In parenthesis I may remark that artificial feeding is almost unknown here, since the poor generally suckle their infants until they are eighteen months or two years old.) The epidemic affected children of both sexes, of robust and delicate constitution; and most especially such in whom nutrition was going on very favourably, and who had good breast-milk. In a few cases the little patients had suffered for a few days from diarrhœa previous to being attacked with dysenteria; but mostly no premonitory symptoms were observable, and the children had very good appetites and were perfectly well, when they were suddenly seized by the disease.

Its commencement was signalised by frequent mucous evacuations with which blood was soon seen to be mixed. The quantity of blood in the motions rapidly increased, and pure blood was often evacuated, mixed with very little mucus and no fæcal matters, so that it resembled bloody sputum. After, from twenty-four to forty-eight hours, fever supervened, which generally lasted one or two days, while in a few cases it was protracted over a longer space of time, or it made considerable remissions, followed by fresh paroxysms. The motions now come on every hour, every quarter of an hour, and in some instances even every few minutes. In some patients I counted as many as sixty in twenty-four hours; they were accompanied with violent pain, and terrible tenesmus preceded the evacuations which were generally very scanty. The children roared with pain, burying their heads in the pillows and lying on their knees. The mucous membrane of the rectum protruded and showed the pathological anatomy of the disease. It appeared strongly tumefied, dark red or violet, and was covered with erosions which appeared either in transverse stripes or the whole membrane looked like one large wound. The microscopical examination of the evacuations showed in the beginning considerable quantities of epithelial cells, mixed with molecular bodies, and now and then many blood-globules; or they only contained hæmatine without a corresponding number of globules; all this stuck together and was suspended in a thick glutinous, transparent mass. At a later period neither epithelium nor detritus was to be observed, but completely developed pus corpuscles, together with blood-globules were passed with the same glutinous basement substance. In one case I recognised elastic fibres, a proof that there was not only exudation and erosion, but real ulceration and loss of substance in the stratum submucosum. This case, which was that of my own child, aged eight months, had a favourable course. That the affection had its seat in the rectum only, was proved by the fæcal matters which appeared quite normal, being evacuated independently of the bloody and mucous discharge; in some cases however, the colon was also attacked, and there was diarrhœa which made the disease much more dangerous; or the digestive function of the stomach was disturbed, vomiting occurred, the stercoral matters were green and of an offensive smell. In most cases however, the evacuations were devoid of smell during the whole course of the disease. The abdomen was generally soft and flat. After some time the fever left the little patients, but the disease itself was not at an end; the children remained very weak and depressed, they liked to rest on the abdomen with the head hanging, the extremities were cold, the skin was pale and flabby, the features haggard, the eyes weary and hollow, and the expression faint and melancholic. The emaciation was not very considerable unless diarrhœa had also been present. If a fatal issue took place, it generally occurred under symptoms of the utmost exhaustion; in some cases several paroxysms of eclampsy took place and the children died in a fit, after the evacuations had become purely bloody, or had entirely ceased in consequence of paralysis of the bowel.

As the disease was very frequent both in town and country, the mortality was very considerable. In such cases as took a favourable course, the motions became more rare and less painful; but even during convalescence they remained bloody and distinct from the fæcal evacuations. Weakness and anæmia continued for a long time after the dysenteria had quite disappeared. The disease lasted for from one to three weeks.

In the common sporadic dysenteria of infants during dentition the following treatment has a rapid and beneficial effect:—At first a purgative, two to eight grains of calomel is given, followed by from six to twelve grains of bismuth, several times a-day, and also magnesia with or without mucilages. This treatment was also resorted to in the late epidemic, and not without success; but its effect was not so rapid and decided as it was in the sporadic form of the disease. Enemata of amylum, with bismuth were also simultaneously administered, and after the fever was gone, laudanum was added to the enema; but it had no remarkable effect upon the tenesmus, and many of the little patients were unable to retain it. Enemata of astringent medicines, alumina (grs. xij. in ʒj.) and extract of rhatany (grs. x. in ʒj.) with or without laudanum were also used, and especially rhatany seemed to act favourably in some cases. In such cases as were not accompanied with fever, baths had a very beneficial effect. Some colleagues have seen good results from cool sitting-baths and also from cold fomentations to the abdomen, which were left until they became warm. In one case, a child of 9 months, the fever had a quotidian intermittent type; it began with cold extremities and yawning, and finished with strong perspiration. The spleen was also somewhat swollen. This was on the sixth day of the illness which was very severe, the collapse became exceedingly threatening, the motions purely bloody, very frequent, and the pain excessive. Six grains of quinine in water were then given during the day. The rapidity with which the lost tone was restored was marvellous, but this medication had not the slightest influence upon the

local disease of the mucous membrane of the rectum, which only healed after very protracted suffering. Whether the quinine in this case acted only as a tonic, or also as an anti-pyretic and anti-miasmatic remedy, I will not attempt to decide. Change of air had often a good effect, but removing children into the country did not take them out of the reach of the epidemic. A French Army Surgeon who has long practised in Algeria, has recently assured me that in the dysenteria in children which occurs there every summer, he could do nothing without quinine.

FRANCE.

Paris, October 7.

ON INFANTILE PARALYSIS.

M. Chassaignac, the Surgeon to the Hôpital Lariboisière, has recently drawn attention to a peculiar form of paralysis which occurs rather frequently in children of two and four years, mostly attacks the upper extremities, and is always caused by an external injury, either a pulling of the limb or a fall. The affection always appears suddenly. In fourteen cases observed by him, the paralytic symptoms came on immediately after the children had been violently pulled about by the arms. It is generally an incomplete paralysis, for although the mobility is completely lost for the first two or three days, it soon reappears, although in a lesser degree; at the same time the skin is in an hyperæsthetic condition. The pain which accompanies the loss of power, comes on after the pulling, and is frequently so violent as to cause the child to scream, but this gradually subsides, and is at last only felt, when the child tries to move the limb. When the upper extremity is affected, the chief seat of the pain is the edge of the deltoid muscle, if the lower, it is at the exit of the sciatic nerve. The paralysed arm hangs down at the side, and is in pronation, so that the palm of the hand is turned towards the hip. When the elbow is supported, the hand drops, as in paralysis of the extensors. There is no deformity such as is caused by dislocation, fracture, tearing of ligaments or muscles; neither tumours, redness, increase of heat, nor ecchymosis, and after four or seven days, the paralytic symptoms gradually disappear, and the limb regains its former power, and is free from pain. The cause of this affection is a concussion of those nervous plexuses from which the nerves of the extremities take their rise. As the affection disappears spontaneously, a treatment is scarcely necessary, but frictions with spirit of camphor, and supporting the limb by a bandage, are useful.

ELECTRICITY IN DIABETES.

A paper by M. Semniola, was lately read at a meeting of the Academy of Sciences, in which this gentleman proposes a new remedy for the cure of diabetes, viz. energetic Faradisation of the vagus, by which, he stated, he had obtained not only a diminution of the sugar in the urine, but also of the quantity of the urine itself. This effect is, however, limited to from five to eleven hours, when a new application becomes necessary. If "organic disturbances" are complicated with the diabetes, electricity ought not to be resorted to; in other cases, however, it has decided curative effects. Cold douches and small doses of strychnia are given at the same time to accelerate the cure.

ON POISONING OF WATCHMAKERS BY COPPER.

Dr. Perron, of Besançon, has made some researches on the above subject, which are of interest. For several years the manufacture of watches in Besançon has greatly increased; there are now about 300 watch manufacturers, who employ about 3000 workmen. These workmen continually handle gold and copper, and statistical observation has proved that mortality by consumption is exceedingly great in this class. Out of 200 deaths in watchmakers, no less than 127 are caused by tuberculosis, and of the deaths by consumption in the whole population of Besançon, the watchmakers furnish 40 per cent., while the proportion of the number of watchmakers to that of the other population is not 5 per cent. Dr. Perron believes the following to be the causes of this great mortality:—The sitting posture which the men are obliged to retain for so many hours in the day, and the necessity of remaining in a cold room without exercise; the irritation of the lungs by the metal dust; and the paroxysms of fever, caused by the absorption of copper. The latter is thought to be the most important cause, by Dr. Perron, and he gives the following description of the symptoms of chronic poisoning by copper, as they occur among these men:—The pulse is frequent, the skin hot, the throat dry; most of them complain of pain in the epigastrium, in the region of the kidneys, and in the head; many suffer from indigestion, enteritis, diarrhœa; and others have a feeling of constriction, and an acute pain in the throat. The teeth are in nearly all such cases coloured more or less green, and almost bronzed. These symptoms are especially striking in the apprentices, who are almost exclusively occupied in filing copper. Many get accustomed to the injuries of their avocation, but others become so ill a few weeks after having first entered the shops, that they can no longer continue to work, and are compelled to embrace another calling.

In many cases the symptoms take a very severe form; acute colics, fever, burning thirst, vomiting, diarrhœa, or obstinate costiveness which lasts from twenty-four to thirty-six hours, are observed. The nutrition is also mostly impaired, the muscles are badly developed, the complexion haggard, the look miserable. The continual absorption of small doses of copper, and its local and direct action, the frequent repetition of toxic and febrile symptoms, and the cachexia at last produced by it, are the causes of the prevalence of consumption among these men. Dr. Perron proposes as a prophylactic measure, that emaciated persons with tuberculous diathesis, should not be allowed to continue this calling, and to recommend as much exercise as is possible, abundant and succulent food, ventilation of the workshops, great cleanliness, baths, the use of aperients and diaphoretics, and the wearing of moustaches.

SWITZERLAND.

Berne, October 2.

THE MANŒUVRES OF THE SANITARY DEPARTMENT OF THE SWISS ARMY.

As far as I am aware, the organisation of the Sanitary Department of the Swiss Army is totally unknown abroad, and as it possesses many interesting and instructive peculiarities, I will to-day send you a short account of it; and, I believe, the best way to do this will be to report to you the doings of one of the last "sanitary courses," which are held every six months, and which I have personally witnessed.

A number of Medical men, sick attendants, and commissaries of ambulances were assembled in Zurich. The Staff-Surgeon first gave them instruction in the organisation of foreign armies as well as of the Swiss forces, and the execution of the sanitary measures necessary for the efficiency of the service, the ambulances and Hospitals, the general administration, the keeping of accounts, etc. They were then shown the whole material necessary for the sanitary arrangements, and had to practise its application, unpacking and re-packing. Especial attention was called to the transport of the sick and wounded by rail and other means of locomotion, regard being had to the experience made in the last wars. Manœuvres were then made under the command of the chief Staff-Surgeon of the Swiss army. A sham fight by the artillery and the infantry took place for forcing the passage of a river, and thirty soldiers were left wounded along the banks, ticketed with cards stating the kind and locality of the wounds. This was done in order to test the efficiency of those attendants whose special duty is the search for, and the transport of, the wounded.

At a certain distance from the line of battle, on both wings of the force, the Surgeons set up in order to dress the wounded; all necessaries, straw, water, etc., being provided in abundance. A certain number of attendants and their helpers then advanced to the field of battle, searched for the wounded, made a rough preliminary dressing, and then transported them on suitable carriages to the Surgeons' tents where the real dressing was done, as simply as possible. Dressings with triangular towels were used for the wounds of the upper extremities, of the head and the feet, and for a large proportion of the wounds of the thigh. For fractures, different forms of single and double splints were employed, and the several methods of applying the gypsum bandage were practised—gypsum being always at hand in the Swiss ambulances.

Capsules which are moulded for enclosing the whole extremity, and are only open at the top, will also be shortly introduced. This is of great importance, as they are superior to any other contrivance for the transport of the wounded. For limiting the use of the tourniquet as much as possible, the attendants and their helpers are practised in digital compression of the principal arteries, the experience of the Russian and English armies during the war in the Crimea having fully shown that this is far preferable to the use of the tourniquet. In the Italian campaign of 1859, therefore, scarcely any tourniquets were used; and even when amputations were made, digital compression was exclusively employed.

At a suitable place an ambulance was put up, and with the greatest rapidity a tent, which afforded room for about twenty wounded persons, was struck, and a transport waggon mounted. The attendants then unpacked the material, prepared beds in the tent, and a field-kitchen, according to the French system, in its neighbourhood; in from fifteen to twenty minutes the flag waved from the tent as signal that all was ready for the reception of the wounded. The chief of the ambulance assigned their proper places to every Surgeon and attendant, etc. A waggon, drawn by a horse, was sent to fetch the wounded from the Surgeon's tents on the wings of the force; such wounded persons as were still able to walk, followed the waggon on foot. They were then taken to the operating tables; the wounds were closely examined, the necessary operations made, and durable dressings put on; everything being done "*tuto, cito et jucunde.*" The commissary of the ambulance meanwhile distributed the material and made the necessary entries, while the waggon continually brought fresh supplies of wounded.

In the meantime another party had formed a suitable lazaret in a house and shed in a neighbouring village, to which, in order to prevent a crowding of the ambulances, the wounded were from time to time transported, and there properly cared for. These proceedings were continued until all the wounded had been brought in, after which, the ambulances were cleaned and repacked, and the tent raised.

By these exercises the sanitary field service was practised in its whole extent, and the connexion and the mutual action of all its parts clearly shown. In order to afford a better view of the whole and to avoid loss of time, the several stations for rendering aid were situated much nearer to each other than would be the case in real warfare.

I must not omit mentioning that we have no special sanitary troops, as is the case in some foreign armies, since the number of combatants would be thereby too much diminished; but the sick-attendants form the nucleus of the sanitary troops, and if these do not prove sufficient, assistants are taken from the ranks. The attendants are therefore both soldiers and nurses, and these exercises by making them acquainted with all improvements introduced in the sanitary arrangements, render them more efficient than elsewhere. I have seen the sanitary service of the French armies during the whole of the Italian campaign of 1859; and in comparing with it the Swiss, I cannot speak too highly of the zeal and efficiency of the latter.

Two such sanitary courses as just described are held every year,—one for our Eastern, the other for the Western forces, and in each two or three sham dressings and nursings of wounded take place, and always under varied circumstances. By their means the commissaries' attendants and their assistants are made practically acquainted with the details of the service and their respective duties, and such young Medical men who have only seen civil practice have the opportunity of learning the difference between this and military surgery. The circumstance that every Medical man in Switzerland is, at the same time, civil and military Physician, has perhaps some drawbacks, but I think the preceding lines have shown that it is also not devoid of advantages.

THE MEDICAL FACULTY.

Death, that most unsparing of tyrants, has been rife amongst us of late. Not long ago I reported you the demise of our much lamented Professor Vogt, and again to-day I have to mention two other deaths. Professor Hermann, Superintendent of the Obstetrical Clinique, died in June, of pneumonia, at the age of sixty. His vigour of mind and body had continued unabated to the last. In August, Dr. Wilhelm Rau, Professor of Ophthalmic and Aural Surgery, author of a valuable treatise on the diseases of the ear, and many monographs on inflammation of the eye, died, after lengthened suffering, of morbus Brightii. His case was very remarkable. Amblyopia had been present for a considerable time, which was shown by the ophthalmoscopic examination to be the result of retinitis albuminosa. Several months later albumen and fibrinous casts appeared in the urine, and, before dropsy set in, uncontrollable hæmorrhage from the nose at frequent intervals formed a striking symptom. During the last few months dyspnœa and real asthma tortured the unfortunate patient to the last degree; nevertheless, he gave lectures at his own house as late as June last, and did not give up the hope of recovery until the end. Professor Hermann's place has already been definitely filled up by his son, who has been attached to the University for a number of years. Dr. Rau's place will soon be open to competition.

IRELAND.

Dublin, November 6.

Dr. M'Clintock's period of office having expired, the usual septennial election of Master of the Dublin Lying-in Hospital took place on Friday, the 1st inst., at a General Board of the Governors of the Hospital, the Lord Chancellor of Ireland presiding, when Dr. John Denham was elected. Dr. Robert Adams was, at the same time, chosen as Consulting Surgeon, in the room of the late Dr. Cusack, and the Rev. Benjamin Gibson was, on the motion of the Hon. Judge Kelly, seconded by Sir John Kingston James, Bart., appointed Chaplain, in the room of the Rev. A. W. Lect, resigned. The following vote of thanks to the outgoing Master was proposed by Sir John K. James, Bart., seconded by Charles Johnson, Esq., M.D., and unanimously adopted: Resolved—"That the thanks of this Board be given to Dr. A. H. M'Clintock, for his valuable services in discharge of the duties primarily attached to his office as Master of this Hospital—for the judgment and efficiency with which he has, during the period of his Mastership, suggested and carried out several important improvements permanently affecting its sanitary condition, and for his unremitting and zealous attention to the general interests of the institution."

At a meeting of the Governors of St. Patrick's Hospital for the Insane (founded by Dean Swift), held on Monday, the 4th inst., the Lord Chancellor in the chair, John Hamilton, Esq., F.R.C.S.I., Surgeon to the Richmond Hospital, was elected Visiting Surgeon to the Hospital, in the room of the late Dr. Cusack.

On the same day the Medical Session of 1861-62 was inaugurated, in many of our institutions, with the usual annual introductory addresses. One theme unhappily pervaded many of these addresses—the sad, and I might say unprecedented, havoc which the last few years have made among the Medical Profession in Dublin, and more particularly among its most distinguished members. Even last Saturday has, by the sudden demise of Dr. Brereton, added his name to the melancholy list. Of him a morning journal (*Saunders News Letter*) truly remarks that "for nearly forty years he had been a successful Practitioner in this city, and had the good fortune to win the friendship of most of those with whom he came into contact; and in common with his professional brethren he was ever ready to give freely and gratuitously to many in humble circumstances the benefit of his skill and advice, and was also remarkable for his unwearying attention to his patients, whether rich or poor. Dr. Brereton was a Master of Arts of the University of Dublin, a Graduate in Medicine of Edinburgh College, and a Fellow of the King and Queen's College of Physicians."

At Dr. Steevens's Hospital and Medical College, the honours awarded at the termination of last session were distributed to the successful candidates on Monday the 4th inst., at ten o'clock, by the Right Hon. the Lord Chancellor. His lordship stated that he attended on that occasion not merely as an *ex-officio* governor of the Institution, but as Vice-Chancellor of the Queen's University in Ireland, with which the Hospital is to a certain extent affiliated; he attended in both those capacities, as a matter of duty, but he attended also from motives of inclination, because it was always gratifying to him to be brought into contact with the members of a Profession so valuable in the eyes of all men, as that of

Medicine. He attended also from motives of interest. He did not mean mere personal interest, but such an interest as should be felt by every member of the community, to have educated well and soundly the members of a Profession to which they must from time to time owe their preservation—gentlemen who from time to time would have it in their power to save valuable lives to the community. The young gentlemen who were now before him, would be called on in the discharge of their duty to be the preservers of the lives of a large portion of the community; Medical men were the guardians of life, and it was the interest of the community to have the members of that Profession well and soundly prepared in their vocation. Therefore, from all those motives, duty, inclination, and interest, he attended on this occasion.

The Lord Chancellor alluded to the importance of general education, and spoke in terms of approval of the stress laid upon it by the General Medical Council, who consider that classical and scientific learning—in fact a University education—is as much to be desired as any other part of their studies. On the conclusion of the Lord Chancellor's address,

Dr. Croker read a letter from Mr. Henry Thomas Cusack, in which he desired to offer dies for one silver medal and two bronze medals, to be given to the most proficient students in each year, as a means for commemorating his father's memory in the Hospital. The letter went on to state that Mr. Cusack would supply those medals yearly during his lifetime, and take steps to have them made as permanent premiums in the Institution.

Dr. Croker then said that he would give any fees which he might be entitled to from the Hospital, to be divided into two prizes, one to be given to the best answerer in Medicine, and the other to the best answerer in Surgery each year.

At the Meath Hospital the Session was opened on the same day, and at the same hour at which the proceedings just detailed took place, with a very able address by Mr. Maurice H. Collis. Mr. Collis naturally dwelt at much length upon the losses the Hospital had sustained during the past year, in the death of Mr. Porter and Mr. Rynd, giving an interesting sketch of the career of each, and contrasting their professional acquirements and characteristics.

At the Royal College of Surgeons, Dr. Jacob, in his opening lecture, reviewed at some length the Report of the General Council of Medical Education and Registration of the United Kingdom, and subsequently gave a sketch of the Professional Examination as it would probably be conducted when the arrangements likely to be made for its optional division into two portions, should be completed. He called the attention of the Students to the necessity of making themselves practically conversant with demonstrations and dissection. He deprecated the idea that the use of written papers would prove any difficulty in the way of the maturer Students. The Report provided that every Student, before Examination, shall be required to give a declaration that he has not been rejected by any of the Examining Boards within three months preceding. That regulation had been introduced in order to correct a crying abuse which had been complained of for some years, that of gentlemen who had failed to satisfy the Examiners at one place going off and passing for their Licence without question elsewhere. Arrangements had been entered into between the College of Surgeons, and the King and Queen's College of Physicians in Ireland, whereby Licentiates holding the Diploma or Letters Testimonial of either College, would not be examined on the subject peculiar to that body on presenting themselves at the other Institution. Dr. Jacob concluded an interesting and instructive lecture by commenting on the advantages enjoyed by Students in Dublin for the acquisition of Medical and Surgical knowledge. He also alluded to the great opportunities afforded for the study of botany by the existence of two botanic gardens, and the prolific resources of the country generally in this respect. He drew the same parallel with regard to zoology, and in his closing remarks congratulated such Students as were commencing their studies on the wide field and the advantages for acquiring sound practical professional knowledge which presented themselves. Dr. Jacob, at the close of his lecture, was loudly applauded.

In the Ledwich Medical School the opening lecture was delivered by Dr. Mason; that in the Medical School of the Catholic University was given by Dr. J. A. Byrne. The impossibility, however, of comprising everything within the limits of a letter, must be my apology for not attempting a sketch of these able and eloquent addresses.

In the University of Dublin the opening lecture was delivered by Dr. McDowel, Professor of Anatomy and Physiology in the School of Physic.

The first clinical term in the magnificent *Mater Misericordiæ* Hospital recently erected, under the auspices of the "Sisters of Mercy," in the open ground at the upper end of Eccles-street, commenced on Tuesday, November 5, with a very able address by Andrew Ellis, Esq., F.R.C.S.I., Professor of Surgery in the Catholic University. After the Lecture, the numerous visitors were conducted through the Hospital, and expressed their admiration of the beauty of its construction and the excellence of its arrangements. The building, presenting a handsome front to the street, stands in the most elevated part of the city, commanding an extensive view of the surrounding country. The portion already finished, about one-fourth of the full design, has cost £25,000 and contains 100 beds; but it is intended that the Hospital, when completed, shall be furnished with 500. The wards are spacious and admirably ventilated, the beds are placed far apart and along one side only of the wards, and every arrangement which experience has shown to be desirable in the construction of Hospitals, and conducive to the health and comfort of the patients, has been adopted on the most liberal scale.

GENERAL CORRESPONDENCE.

DEATH UNDER CHLOROFORM.

LETTER FROM MR. NOURSE.

[To the Editor of the Medical Times and Gazette.]

SIR,—As it is important that every case of death during the inhalation of chloroform should be at once and accurately reported, so as to afford materials for the fullest consideration of these rare accidents, I beg to send you the notes of an instance which has just occurred.

I was requested by Mr. Field to administer chloroform during an operation for the removal of internal piles by the ecraseur. The patient was a large, stout, very muscular man, aged 50; the abdomen was prominent, and the countenance that of a man accustomed to drink, but not indicating any abnormal condition of the heart or other organ. There was no arcus senilis, and the pulse and respiration seemed natural. Two measured drachms of chloroform poured on a hollow sponge were first inhaled, in the usual gradual manner. The stage of excitement was strongly marked, with much muscular action and vociferation. After several minutes, the chloroform being exhausted, forty or fifty minims more were poured on the sponge, and inhaled at intervals. While the vociferation and struggling yet continued, some stertor appeared, and the sponge was at once withdrawn. In another minute full stertor came on; the face, without any pallor, showed a dusky, livid hue, the pulse ceased, and the respiration was becoming visibly slower. Mr. Field had not begun the operation. We instantly commenced artificial respiration, and slapped the face and chest with a wet towel; but only a few more inspirations or gasps were obtained. We continued the same means, took blood from the jugular vein, which was turgid, rubbed the limbs, and applied electro-magnetism, assisted by two other Medical men, but after the lapse of an hour, no sign of life being elicited, and the body becoming cold, further efforts were evidently useless.

On a post-mortem examination, the heart was found loaded with fat, its muscular substance thin and weak, and the walls of the right auricle and ventricle in a state of fatty degeneration. The right cavities were gorged with fluid blood. The valves and great vessels were healthy, and no other organ appeared to be in any abnormal state. Death had clearly occurred from failure of the heart's action, induced much more rapidly than could have happened under natural circumstances by chloroform, owing to the weakened and encumbered condition of the heart. I am, &c.

W. E. C. NOURSE, F.R.C.S.

11, Old Steine, Brighton, November 6.

CASE OF HYDROCEPHALUS.

Letter from Dr. Richard Stanistreet.

[To the Editor of the Medical Times and Gazette.

Sir,—Should you think the following case of hydrocephalus worthy of recording, I shall feel obliged by your giving it a corner in your excellent Journal:—

I was requested to visit A. B., aged 2 years, on July 6, and was informed that he had been very restless on the previous night. On examination I found him a large, strong child, with rather a larger head than natural, whose health had been previously good. He laboured under the following symptoms:—Face slightly flushed; tongue a little coated; pulse 90, rather full; bowels confined for several days. I prescribed a powder, composed of calomel gr. iij.; rhei, gr. x. to be given immediately, and a teaspoonful of the following mixture to be given every four hours:—℞ Liq. ammon. acet. ʒv.; liq. antim. tart. ʒj.; syrup simpl. ʒss.; aquæ ad. ʒiv. M.

On the next day I found the bowels had acted freely, and the skin was moist. Ordered the mixture to be continued. On the 8th the true nature of the case became evident. The skin became dry and hot; slight nausea; urine scanty and high-coloured; bowels confined; great irritability; tongue coated, at times a good deal of drowsiness. Ordered the head to be shaved. ℞ Calomel gr. j.; sacch. alb. gr. j.; M. Ft. pulv. 3tiis hôris sumend. Emp. lyttæ ij. pone aur. to be dressed with ung. hydrarg., and an enema of thin gruel to be administered. On the 9th I found my little patient had five convulsions during the night. Pupils slightly dilated; left side of face paralysed; the left eyelids remaining quite open during sleep; head thrown back so stiffly that the little sufferer lay in bed resting almost entirely, when quiet, on the head and heels, and seemed to suffer extremely if the head was moved at all forward. Ordered Emp. lyttæ nuchæ appl. Cont. calomel; and iod. potassii gr. j. to be given every third hour. During the next week the symptoms presented little variation; the treatment consisted of blisters applied daily to the head, and dressed with ung. hydrarg., the calomel to be continued as well as the iod. potassii, an enema to be administered every night, and the strength to be supported with chicken-broth. On the 15th the mercury began to show its constitutional effects by the production of green stools. Ordered cal. gr. j. 6tis hôris, and iod. potassii gr. j. 2dis hôris, the enemata to be continued, and the head dressed with medicated cotton. From this date the patient began to improve, the head could be moved without pain; pupils gradually getting smaller; sleeps better; paralysis still continuing and very little power over the limbs. 17th.—The calomel to be discontinued, also the iod. potassii. Head still kept shaved, and a small blister applied to the vertex to be kept open with No. 1 albespeyres, the limbs to be bathed twice daily with warm salt water, and the bowels kept free with pulv. jalapæ comp. Strong beef-tea to be given. After the discharge had been kept up for a month, I was gratified to find all paralysis had disappeared; the limbs had fully regained their power, and my little patient's health quite re-established, so that I was able to have the head healed up, and the child to use his ordinary food, and up to the present time he has continued perfectly well.

I am, &c.

Richard Stanistreet, M.D., L.R.C.S.I.

Malahide, Co. Dublin.

ACCIDENTAL POISONING BY STRYCHNINE—STATE OF PRIVATE SURGERIES.

[To the Editor of the Medical Times and Gazette.]

Sir,—Do, I beseech you, notice in your valuable paper the case of a child, aged four years, poisoned near ——— by taking strychnine instead of santonine. The child had worms, and a Practitioner was consulted, who prescribed santonine; but dispensed the medicine himself, and gave strychnine by mistake. The child soon died in convulsions. At the inquest the Practitioner said, according to the newspaper report, "That he meant to administer powder for worms from santonine. In his surgery, however, the santonine bottle and the strychnine bottle stood together. Both were covered with blue paper, and both were labelled, but the rain had got in and destroyed the writing. He had, in consequence, taken up and used the wrong bottle. The jury found that the child had died from strychnine inadvertently administered by Dr. H——. They recommended that 'he and all other Doctors should have their bottles properly labelled.'"

Now, Mr. Editor, this case is not singular; and it reveals a state of things in private dispensaries and surgeries, which exists more often than may be imagined, and is doing infinite harm to us Dispensing Practitioners in the country.

I was bred up in the old school, and learned dispensing thoroughly. I'll undertake to say that my surgery is as clean as any kitchen, every bottle carefully labelled and in its right place, and all the knives, mortars, etc., always put away clean. My assistant gets into a good routine, and is forced to stick to it; and is occasionally helped and supervised by my wife and daughter. Consequently, if any gentleman comes into my place I am not ashamed. I do not pretend to the parade and finicking smartness of a town chemist; but I keep a limited stock of the best medicines, throw all old stores away, keep nothing that I don't prescribe myself, and endeavour to have a business-looking, reputable, and comfortable place.

We have not to keep the extensive stock of a town chemist. I have no oxyde of cerium, nor phosphite of manganese, nor essence of watercresses, nor any of the noveltics with which coxcombical town Physicians sometimes try to *floor* us country folks. If they are wanted, I have the prescriptions made at a chemist's, and do not choose to add to my stock of spoiling materials in little pots or bottles. No, Sir, a working stock of the best drugs, and not too many of them, is what I aim at. No man can use many medicines; if he attempt it, he will not understand the uses of any.

But, Sir, some of my neighbours have things in a different and worse state. Very few of them ever learned to dispense under good teaching. One or two of the young ones were not apprenticed to a General Practitioner, but picked up some dispensing at Hospitals and Dispensaries, where forty patients have to be served in an hour, where the drugs are *shot*, *i.e.*, guessed, and neither weighed nor measured; and if the Physicians fancy it is of any use for them to prescribe complex combinations, so much the simpler are they. Of course the patients' bottles are filled with what comes nearest, unless they consent to prescribe the mixtures that are kept in stock. So what they never learned as youths, they don't practise as men. I have been into private surgeries where the labels were all rotting with damp, where not a pill knife, nor scales, nor mortar was to be had fit for horse physic. I went once to a neighbour's to see some patients in his absence and make up the medicine. His wife helped me in the latter duty. I was going to take down a bottle, labelled tinct. calumbæ, "You must not take that," she said, "it's digitalis: there is another label at the back;" and so there was, but obliterated by dirty finger-marks. The scales and measures had had a long holiday, and the drugs, except a very few in constant use, were very seedy, and put into bottles with old and wrong labels, so that how they avoided manslaughter, I can't think. The surgery, too, was a sort of shed, looking like a knife-house, and no cleaner.

Such things are sure to crop up to the top somehow and sometimes; and in these days of active competition if my brethren of —— —— don't want to see their patients "getting a prescription" from some Town Physician, and having it made up by a Town Chemist, I advise them to set their surgeries in order in good time. The best drugs—not too many sorts—and cleanliness, as in a kitchen, are my maxims.

I am, &c. General Practitioner.

Lithia Water.—We have tried the lithia water made by Mr. Hogg, and have seen the machinery by which it is manufactured. We consider that Medical men may depend upon its uniformity. The water is highly carbonated, is very agreeable, and contains the proportion of pure carbonate of lithia of two or five grains in each bottle. We have no hesitation in recommending it to the Profession as an elegant and carefully prepared mineral water.

A Sensible Testimonial.—W. James Wattsford, Esq., of Greenwich, has had a purse of gold, little short of £400, presented to him by his friends, general and Professional, on the occasion of his retiring from practice, in which he has been engaged nearly fifty years.

OBITUARY.

DR. SCOTT.

(From a Correspondent.)

Dr. Scott, the son of Captain James Scott, R.N., was born at Calne, in Wiltshire, August 12, 1788. He was apprenticed to Mr. Dobson, of Harlow, in Essex, studied during four years at Guy's Hospital, under Cline, Abernethy, Sir A. Cooper, etc. He was dresser to Mr. Foster at the same time with Tyrrel, Callaway, and Aston Key. He commeneed praetice at Hatfield, in Essex, in 1814, but afterwards came to London. His great mechanical abilities were of frequent use in his practice. In the year 1822, we believe, the Primate of Ireland having died from the administration of laudanum by mistake, Mr. Jukes conceived the idea that poison might be extracted from the stomach by means of a tube. Not being an anatomist, he conferred with his friend Dr. Scott, and they jointly conducted experiments which resulted in eomplete suceess. But some scepticism being expressed as to the genuineness of the accounts published of these experiments, Mr. Jukes submitted to having a coloured fluid extracted from his stomach by Dr. Scott, in the presence of Sir A. Cooper and the pupils of Guy's Hospital. The original apparatus was somewhat clumsy, being simply a long tube appended to an india-rubber bottle; but John Read, a gardener, having, in eonjunetion with an ingenious man named Gibbon, patented a pump to be used for Medical purposes, Messrs. Seott and Jukes eonsented, for a consideration, to his applying their invention to it, and thereby forming the stomach pump. For some years Dr. Scott continued to assist Read with his medieo-mechanical genius, and at the same time had an extensive and lucrative practice, but ill-health, which marred his prospects through life, taking him from his professional pursuits for long periods at a time, his friend Dr. James Johnson suggested that he should open an establishment for the sale of his medico-mechanical inventions and improvements, which could be conducted by others when he was confined by illness. At first the scheme promised immense sueeess, but being left to subordinates, and the Doctor being eminently unpractieal, it—like almost all trade speeulations entered into by Professional men—failed. Wearied, disappointed, and out of health, he aeeepted the appointment of Resident Physician at Woodhall Spa, Lineolnshire, in 1851, where he remained nine years; but having eontraeted there ehronic dysentery, he immediately on leaving became seriously ill, and endured unspeakable suffering until Friday last, November 1, when he expired. In the early part of his career Dr. Scott contributed much to Medieal literature; he also effected great improvements in acoustie instruments for the use of deaf persons, for one of which he reeeived the thanks of the British Association.

MEDICAL NEWS.

Royal College of Surgeons of England (a).—The following Gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on 5th inst., and when eligible will be admitted to the Pass Examination:—

Brereton, Alfred William, London Hospital
Bloxam, Matthew, St. George's Hospital
Bramley, William Sturdy, St. Thomas's Hospital
Clarke, Alexander Carson, Dublin
Carson, Alexander Tertius, Dublin
Cocksedge, Thomas Abraham Jerningham, St. George's Hospital
Dyte, David Hyman, London Hospital
Grigg, William Chapman, King's College
Holt, John, Manchester.
Ireland, John Roaf, Birmingham
Jordan, Myles Joseph, Dublin
Jordison, Robert Lloyd, Guy's Hospital
Levick, George, London Hospital
Roberts, Robert, Glasgow
Spedding, William Alexander, Cork
Tomkins, Charles Payne, Cork.
Topham, Herbert, Guy's Hospital
White, Arthur Calcutta, St. George's Hospital
Wright, Frederick William, Edinburgh.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, October 31:—

Croker, John Rees, Islington
Goode, Henry, Derby
Grove, William Richard, Uttoxeter, Stafford
Hayward, Sidney, Queen Ann-street West
Hood, William, York
Walker, William Holmes, Marske.
Woodruffe, Daniel, Ipswich, Suffolk
Wright, Thomas Poyntz, Tiverton

The following gentleman also on the same day passed his First Examination:—

Connor, James Heuthorn Todd, King's College.

APPOINTMENTS.

Belcher.—Thomas Waugh Belcher, M.A. and A.B. Oxon. and Dub., Lic. and M.D., K.Q.C.P. Irel. (exam.), has been elected Physician Extraordinary to the Cork Fever and Cholera Hospital.

Carte.—William Carte, L.R.C.S. Irel., Physician and Surgeon to the Royal Hospital, Kilmainham, Dublin, has been appointed a Member of the Medical Claims Board.

Clarke.—Alfred Frederick Stafford Clarke, M.D., M.R.C.S. Eng., L.S.A. Lond., has been appointed Resident Medical Officer to the Kent County Ophthalmic Hospital, Maidstone.

Hamilton.—John Hamilton, F.R.C.S. Irel., has been elected Visiting Surgeon to St. Patrick's Hospital.

Jones.—William Jones, of Ruabon, M.R.C.S.L. Eng., and L.M., L.M. Anglesey Hosp. Dub., L.S.A. Lond., has been elected Medical Officer for South Ruabon District, in the Wrexham Union, Denbighshire.

Lomax.—William John Lomax, M.R.C.S. Eng., L.S.A. Lond., Surgeon to the Dispensary, Lincoln, has been appointed Hon. Local Secretary and Treasurer to the Royal Medical Benevolent College.

Low.—William Cook Low, M.D. Univ. Edin., L.R.C.S. Edin., L.M. Edin., has been elected Medical Officer and Public Vaccinator for the Fifth District and the Workhouse, in the Martley Union, Worcestershire.

Marshall—Henry Marshall, of The Mall, Clifton, M.D. Univ. Edin., F.R.C.S. Edin., M.R.C.S. Eng., has been elected Surgeon to the General Hospital, Bristol.

Sheppard.—Edgar Sheppard, M.D. St. And., L.R.C.P. Edin., F.R.C.S. Eng., L.S.A. Lond., has been elected Medical Superintendent of the Male Department of the Middlesex County Lunatic Asylum, Colney Hatch.

Strickland.—Edmund Strickland, M.R.C.S. Eng., and L.M. L.S.A. Lond., has been elected Resident House Surgeon to the Halifax Infirmary.

DEATHS.

Brereton.—November 2, David Brereton, of Harcourt-street, Dublin, M.D. Univ. Edin., A.B. and A.M. Trin. Coll. Dub., L.K.Q.C.P. Irel. (exam.), L.M. Dub. Lying-in Hospital, aged 61.

Brown.—November 3, at his residence, Clerkhill, Stewarton, Ayrshire, Andrew Brown, of Hillhouse, Ayrshire, M.D, formerly of the Hon. E. I. Co.'s Service.

Brown.—November 1, James Brown, of Saltcoats, Ayrshire, L.R.C.S. Ed.

Dawson.—November 2, William Dawson, of Westbourne-square, Hyde-park, Inspector-General of Hospitals, aged 65.

Evans.—October 31, at Woolwich, Oliver Evans, M.D. King's Coll. Aberd., L.R.C.P. Lond., L.S.A. Lond., Inspector-General of Hospitals and Fleets, aged 63.

Fawthrop.—October 27, Thomas Fawthrop, of The Square, Halifax, L.S.A. Lond., aged 43.

Goodman.—October 27, Gabriel Goodman, of Upton-on-Severn, Worcestershire, in practice prior to 1815, aged 74.

Gunthorpe.—October 27, George John Gunthorpe, of Surrey-place, Kennington-park, M.R.C.S. Eng., L.S.A. Lond, aged 41.

Hebb.—October 26, Christopher Henry Hebb, of Britannia-square, Worcester, M.R.C.S. Eng., (1793), aged 89. He was the first Mayor of the City of Worcester after the passing of the Municipal Corporation Reform Act, and was in the Commission of the Peace for the City for many years.

Moir.—November 4, at Braehead Cottage, Old Aberdeen, James Moir, M.R.C.S. Eng., aged 90.

Wakefield.—Recently, George Wakefield, of No. 27, Ossulston-street, Somers-town, L.S.A. Lond., (in practice prior to 1815).

Westcott.—October 1, at Futtehpore, Robert Westcott, Surgeon to the 3rd Bengal Cavalry, aged 32.

Departure of Prince Leopold for the Continent.—"Prince Leopold, the youngest son of her Majesty, left England yesterday for the South of France, attended by General Sir Edward Bowater, Lady Bowater, the Misses Bowater, and a Physician. The Prince is to spend the rougher months of the year in a more genial climate than is to be found in the British Isles." Our readers will not fail to notice the unobtrusive position which Dr. Gunther fills in the eye of the *Morning Post* men.

Sydney Smith on Fashionable Physicians.—"There is always some man of whom the human viscera stand in greater dread than of any other person, who is supposed, for

the time being, to be the only person who can dart his pill into their inmost recesses; and bind them over, in Medical recognizance, to assimilate and digest. In the Trojan War, Podalirius and Machaon were what Dr. Baillie and Sir Henry Halford now (1818) are,—they had the fashionable practice in the Greek camp; and, in all probability, received many a guinea from Agamemnon dear to Jove, and Nestor the tamer of horses."

HYDROPATHY.—"Such strong and enthusiastic testimony has been borne to the value of Hydropathy by highly educated men, who have chronicled their sensations, that we must, perforce, give credence to the efficacy of that system. Yet ever and anon a shadow of scepticism steals over our mind, for the practice of packing in wet sheets does not tally with our preconceived ideas, or quite reconcile itself to our reason. It is said that by this process all impurities are brought out through the pores of the skin, and that what are called crises superinduced; and we have heard more than one excellent person assert with exultation that after a tight course of packing and asperging they have brought forth as fine a crop of boils and blains as could have been exhibited in Egypt during the prevalence of the plague. Notwithstanding all this, we think that one cold bath in a morning is as much ablution as is good for a man."—*Meditations on Dyspepsia, in Blackwood for October.*

THE PATIENT'S OPINION OF DOCTORS.—"We delight in Doctors, who are the best friends of frail humanity, and the least quarrelsome fellows you can meet with anywhere, except when they wrangle among themselves. No other class of men enjoy life with so keen a relish, or are as indefatigable in their efforts to promote the happiness and welfare of mankind. They are, too—we say it in all seriousness—the most disinterested of mortals; for, although disease is their harvest, we find them always true and faithful monitors, warning us against the evil habits that tend to the destruction of health; and if we were wise enough to profit by their maxims, to live rationally, and to avoid all manner of excess, few would be the fees accruing to the successors of Machaon and Podalirius."—*Ibid.*

AREA, POPULATION, DEATHS, and MORTALITY per cent. in the Summer Quarters 1851-61.

	In 125 Districts and 23 Sub-Districts, comprising the chief Towns.	In the remaining Districts and Sub-Districts of England and Wales, comprising chiefly small towns and country parishes.	All England.
Area in Statute Acres	2,149,800	35,175,115	37,324,915
Population enumerated:—			
March 31, 1851	8,247,017	9,680,592	17,927,609
April 8. 1861.	9,804,598	10,258,014	20,062,612
Deaths in 10 Summer Quarters, 1851-60.	528,681	437,354	966,035
Average Annual Rate of Mortality per cent. of 10 Summer Quarters, 1851-60	2 352	1·756	2·021
Annual Rate of Mortality per cent. in the Summer Quarter, 1861 . .	2·207	1·780	1·989

SANITARY STATE OF PARIS AND LONDON.—At the first meeting for the present season of the Royal Institute of British Architects, the President, Mr. Tite, M.P., in the course of his address, said that all travellers who returned from Paris were, upon a superficial view of what was taking place there and in almost every town of France, disposed to find fault with the comparatively slow rate at which improvements were effected in London. Within ten years Paris had been, in fact, remodelled throughout, and broad streets, open squares, and fine houses had replaced the ancient, narrow, tortuous dens of filth and impurity. It was to be feared, however, that the real sanitary improvements of Paris had gained little by these changes; and, indeed, so long as the water supply and the sewerage there were conducted on the present systems, little effect could be produced on the infallible test of the value of the sanitary arrangements of a town—the average death rate. He advised those who believed that "They manage all these things better in France" to visit the "in-take" of the Chaillot Waterworks, which was unpleasantly near the mouth of one of the great sewers, or to ponder over the charge he would have to pay, even in a private lodging, for the necessity of an Englishman's life—the daily hip bath. In the discussion which followed the President's address, Professor Donaldson said the salubrity of Paris had been greatly increased by the improvements which had been effected there, and thought that they should rather try to imitate these improvements than dwell on their shortcomings. Our own local boards were unwilling to carry out any really great improvement, and London required much of that energy and directness which existed in Paris.

LORD STANLEY ON POPULAR PHYSIOLOGY.—"No man doubts the importance of health. To the poor man it is capital, it is bread, it is independence; with all men it goes far to make the difference between a happy or an unhappy life. There is no more real or tangible benefit which you can confer upon a people than when you reduce the rate of mortality and lessen the amount of disease. In the United Kingdom it is estimated that people ought not to die at the yearly rate of more than 17 in 1000; they do actually die at a rate greatly exceeding this—I think on an average 22 or 23 in the 1000. Now, here we have, with our population of 30,000,000, more than 100,000 lives yearly thrown away. What kills them? Not overwork, not famine, not, in the majority of cases, the hard necessities of their condition; but ignorance, ignorance on their own part, or on that of society, of the physical laws of our being. No doubt there are unhealthy and dangerous trades; there are lives shortened by actual want; but these are comparatively few. Every Doctor will tell you that an immense saving of life would take place if only some three or four single things were estimated at their true value—pure air, pure water, sufficient drainage, and healthy bodily exercise for those who lead sedentary lives. Some one may answer me, "These are matters, except the last, with which landlords and local authorities have more to do than the people. We can't choose the houses we will live in, we drink the water supplied to us, we breathe the air round us, such as it is." "Well," I reply, "but if the people take interest in these things—if they understand their immense practical importance—there is no danger that landlords or that local authorities won't do their duty. If smoke nuisances are allowed to go on because nobody will exert himself to put them down; if good water is objected to because it costs a little more in the rates; if streets and alleys are left mere nests of fever and polution for want of a few drains, the fault is not with individuals here and there; the fault is with the public at large, without whose support and encouragement in an age and country of popular measures, no important work can be carried through." Then as to the habits of those whose occupations are sedentary. I suspect we are few of us aware how rapidly a close indoor existence, where the brain alone is worked, and the muscles don't get fair play, extinguishes health, strength, and in time life itself. Every great city is fed by the influx of strangers from outside. Few, if any, keep up their numbers without such immigration. That is a startling state of things; and it need not be so. Men may live in masses without poisoning one another, and they may be prosperous men of business without sacrificing health to wealth. But they must first have a clear idea of their bodily nature and its requirements; and that is a kind of knowledge which can scarcely ever be out of place."

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 2, 1861.

BIRTHS.

Births of Boys, 947; Girls, 889; Total, 1836.
Average of 10 corresponding weeks, 1851-60, 1651·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	569	509	1078
Average of the ten years 1851-60 . .	551·0	531·8	1082·8
Average corrected to increased population . .	. .	. .	. .
Deaths of people above 90	. .	. .	. .
Deaths in 15 General Hospitals	. .	. .	. .

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	2	16	2	4	7	5
North ..	618,201	1	5	23	4	6	8	2
Central ..	378,058	..	..	14	..	7	8	1
East	571,129	2	..	11	7	9	13	10
South ..	773,160	..	..	30	6	10	11	7
Total.. ..	2,803,921	3	7	94	18	35	47	25

Medical Times and Gazette.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Marcet's paper on Death from Chloroform shall appear next week if possible.

Mr. C. and Subscriber.—It is our rule only to insert notices of deaths of members of the Profession.

Mr. Manley's note shall appear next week.

Bath.—We doubt the expediency on general grounds of conferring the Magistracy on any man engaged in *very active* Professional or trading life, or in any business which absorbs much of his time, and brings him into personal contact or pecuniary relations with his neighbours. Hence Physicians and Surgeons in large practice, as also the parish clergy, are on general grounds, we think, better exempt from the duties of the Magistracy. If a man has retired, and is independent, it is another thing.

The letter on "Romantic Psychology" shall be inserted.

A Foreign Subscriber since 1855.—1. Costello's Cyclopædia of Surgery has recently been completed. We hear that 500 copies were saved from the fire, and we believe that it may be ordered through any London bookseller. 2. Numerous cases of rheumatic paralysis have been recorded, but we know of no monograph on this subject. 3. Our correspondent asks for references to reported cases of "ruptured artery, without laceration of integument."

RESUSCITATION AFTER CHLOROFORM ACCIDENTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Having been asked one or two questions as to resuscitation of patients under chloroform, would you permit me to add to the rules recently published in the *Medical Times and Gazette* (page 362), that the "Faradisation" method should be kept up at intervals for at least two hours. In one remarkable case of death recently, very similar, by drowning, where all hopes were given up of saving the patient, the efforts of the Surgeon, with this form of electricity, were rewarded (after an interval that seems almost incredible) by the perfect recovery of the case; it could scarcely have been less than two hours from the time of immersion till the return of the pulse, and the man was at least twenty minutes under water.

It is very curious that in 100 deaths by drowning and 100 by chloroform the proportion of apnœa and of syncope cases is nearly as possible alike; if there be simple syncope in drowning it is highly probable the "Faradisation" would be very effectual. As in an ordinary hysteric fit in a female, this may have been the secret of the present case. (See *Boston Medical and Surgical Journal*, October, 1861.)

The other point I wish to refer to is this, that if in an Hospital "transfusion" were tried in a chloroform case, the defibrinated blood of one of the lower animals would be the best fluid to inject; it could also be readily obtained where such a grave matter as restoration to life after chloroform would be the reward. I am, &c.

Sackville street, November 2. CHARLES KIDD, M.D.

CHARGES FOR MEDICINE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you inform me in your next Number on the following point:—A patient to whom I sent at Christmas my yearly account, "for Professional Attendance and Medicine during the past year," refuses to pay the same without I supply him with a bill of items, *i. e.*, for medicine supplied, and my solicitor has informed me that I cannot recover the amount in the County Court unless I comply with his request. Is this the case? My own impression is that, not holding the diploma of L.A.C., I can make no legal claim for medicines, but that from my other registered qualifications, as M.D. and M.R.C.S., I can recover for professional services rendered. I shall be obliged by your opinion on the point, and also if you can refer me to any cases which have been brought before a legal court, of a similar kind, and where a judge has given his decision. Does the Medical Act contain any clause bearing directly on the case?

Your reply in your next Journal will oblige. I am, &c.

ST. IVES.

[The words of the Act are very plain,—"Every person registered under this Act shall be entitled. . . . to demand and recover in any Court of Law, with full costs of suit, reasonable charges for professional aid, advice, and visits, *and the cost of any medicines* or other Medical or Surgical appliances rendered or supplied by him to his patients." The solicitor is probably right when he says that the patient may demand an account of the medicines supplied. Had the charge been made for attendance only no such demand could have been made. We believe the plan is becoming very general to charge a stated sum *per visit, including any necessary medicines*, and we think the plan a very good one.—ED.]

COMMUNICATIONS have been received from:—

Dr. ROBERT LEE; Dr. SOUTHEY; Mr. LE GROS CLARK; Dr. MARCET; Mr. ELLIS; Dr. BEALE; Dr. BROWNE, Dumfries; Dr. MILROY; Dr. SALTER; Mr. LAWSON; Mr. GAMGEE; Mr. LAW; Mr. G. WILLIAMS; REGISTRAR-GENERAL; Mr. NOURSE; Dr. DEVENISH; Mr. VINCENT; Mr. WRIGHT; Mr. ROWLEY; Mr. SCLATER; Mr. STODART; Dr. KIDD; Mr. CHESTERMAN; Mr. WATSON; Mr. WHEATLEY; Mr. MANLEY; Mr. CROXTON; Mr. MAW.

APPOINTMENTS FOR THE WEEK.

November 9. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

11. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Clinical Discussion.

12. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Robert Lee "On the Discovery of the Obstetric Instruments of the Chamberlens." (If time permits) Dr. Harley, "Experiments on Slow Poisoning." Mr. Barwell "On Certain Grave Evils attending Tenotomy, etc."

13. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. Solly "On the Propriety of Bleeding in Injuries of the Head, and Affections of the Brain." Council at 7¼.

14. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

15. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. A Practical Evening for the Narration of Cases and Exhibition of Specimens. Mr. Martyn, "A Case of Compound Fracture of the Femur;" Mr. C. Hunter, "A Case of Fibrous Tumour of the Jaw."

EXPECTED OPERATIONS.

King's College Hospital.—The following operations will be performed on Saturday next:—

By Mr. Fergusson—Removal of Fatty Tumour; Operation for Urethral Fistula; for Necrosed Bone after Excision; Resection of Elbow; Cauterization of Knee-joint.

Metropolitan Free Hospital.—The following operation will be performed on Monday next, at two o'clock:—

By Mr. T. B. Childs—Lithotomy.

ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT
The Grosvenor Place School of Medicine,
DURING THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.,
Surgeon to the Royal Orthopædic and the Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital, &c.

Lecture IV.
LATERAL CURVATURE OF THE SPINE, EXTERNAL CHARACTERS, AND MORBID ANATOMY.

Summary: General Remarks—Definition—General Description of Cases included; Weak Spines excluded—External Characters in Cases of Single Curvatures in Different Regions, and in Cases of Double Curvature—Morbid Anatomy—All Confirmed Curvatures, however slight, necessarily accompanied with Structural Changes—General Direction and Form assumed by the Spinal Column in Lateral Curvature—Deviation not in a Lateral Direction—Spiral Twist—Horizontal Rotation—Internal and External Curvature—Deviations in Form and Nature of Structural Changes affecting the Bones and Intervertebral Cartilages—Oblique Articulating Processes—Transverse Processes—No Special Liability to Lateral Curvature in Cases of Rickets consequent upon the Condition of the Bones of the Vertebral Column—Importance of this Question in Reference to Deformity of the Pelvis, and Danger in Child-Bearing.

Gentlemen,—Let us now proceed to the description of the deformity generally called *lateral curvature of the spine*, and as it is only by an accurate knowledge of the pathology of this affection that we can hope to determine the principles of treatment applicable to the different classes of cases which daily present themselves to us in practice, I must ask you to follow me whilst I pursue the pathological investigation of this subject more in detail than many of my auditors might suppose to be necessary. I desire especially to direct your attention to various facts observed in post-mortem examinations I have had the opportunity of making, and to examine critically the more important theories as to the cause and mode of production of lateral curvature upon which the different systems of treatment at present in use have been based.

Sufficient reason might be found for objecting to the continued use of the term "lateral curvature of the spine" in the fact that the curvature is never primarily or essentially in a lateral direction, as I shall hereafter explain. Mr. John Shaw considered the term *serpentine curve* more strictly applicable; Sir Charles Bell described it as the *lateral or sigmoid, or complex curvature of the spine;* and Dr. Dods as the *rotated or contorted spine;* but I should be unwilling to suggest any alteration of a name which has been so long applied to this class of cases, and which at once points to a well known form of *spinal distortion* as distinguished from the posterior or angular curvature always produced by *destructive disease* of the spine.

Lateral curvature of the spine, then, or, as it is termed, *scoliosis*, from *σκολιόω, to make crooked*, may be defined as a deformity or contortion of the spine, in which the bodies of the vertebræ deviate laterally in a horizontal direction, with or without a corresponding deviation of the apices of the spinous processes. I shall hereafter demonstrate to you that in many severe cases of scoliosis the spinal column presents on its anterior aspect a large sigmoid curve, whilst posteriorly very little deviation exists in the perpendicular line of the apices of the spinous processes; and that in slight cases, whilst an internal curvature affecting the bodies of the vertebræ essentially exists, there may be no external curvature or lateral deviation of the apices of the spinous processes.

General description of cases included under the term "lateral curvature of the spine"—weak spines excluded.

Now, by the definition above given, you will perceive that in speaking of lateral curvature of the spine, I refer to a condition necessarily associated with certain structural changes, the nature of which we shall presently investigate; and I wish it to be distinctly understood that I do not believe in the existence of any fixed curvature of the spine, however slight, unaccompanied by such structural changes; in other words, I do not admit that lateral curvature of the spine ever exists merely as a functional condition.

According to the generally-received opinion as to the mode of production of lateral curvature, this deformity is supposed to depend primarily and essentially upon muscular debility, with a lax condition of the ligaments of the spine; structural changes in the bones and intervertebral cartilages taking place only at a late period. There is no doubt that muscular debility frequently co-exists with spinal curvature as seen in young ladies from twelve to sixteen years of age, and that in such cases it may be regarded as largely contributing to the production of curvature, though not the only cause; but it is equally certain that lateral curvature of the spine as frequently, if not more frequently, exists in individuals who do not exhibit any indications of muscular debility; and it is by no means uncommon to see this form of spinal distortion in girls, and also in boys of a healthy and robust appearance, associated with more than ordinary muscular strength. I have three good examples of the latter class now in the wards of the Hospital, in healthy-looking, muscular, country girls whose physical condition appears to many Surgeons who visit the Hospital strangely opposed to the existence of spinal curvature. The fact, however, must be quite familiar to those who have had the opportunity of witnessing lateral curvature of the spine in a large number of cases, though as it does not well dovetail with their theory of the production of spinal curvature, such cases are probably passed over by them as exceptional, or as depending upon some obscure cause,—rickets affecting the spine, for instance, being often assumed without a shadow of evidence,—whereas they really ought to lead Surgeons to criticise carefully the *muscular-debility theory*, and to examine the general pathology of this affection.

On the other hand, Physicians and Surgeons can hardly have failed to observe how frequently general muscular debility exists in very delicate boys and girls, often with a marked consumptive tendency, without any disposition to lateral curvature of the spine. It is certain that only a very small per-centage of such delicate children with feeble muscular power, ever become the subject of lateral curvature. I should say that of all the cases of lateral curvature which have passed under my notice, less than half of them have exhibited any marked indication of muscular debility.

Something more than muscular debility, then, is required to produce lateral curvature of the spine, and the additional cause will generally be found either in some constitutional condition marked by an hereditary tendency to spinal curvature, or in the existence of some local cause acting mechanically so as to produce a long-continued irregular distribution of weight through the spinal column; or both of these causes may co-exist with muscular debility.

In the description of lateral curvature of the spine, now given, let it be understood, then, as my intention to exclude a large class of cases frequently simulating lateral curvature, but which, I think, should be more properly grouped as a special series and described as *weak spines, or cases of threatened lateral curvature*. This class of cases present to us their chief points of interest in reference to the treatment to be adopted, rather than in their pathology, and, therefore, I shall defer the special description of them until we consider the treatment of lateral curvature in its different forms, and the means of preventing it when such mischief appears to be threatened. It is doubtless true, that of such cases a certain proportion will terminate in the formation of lateral curvature, if this event be not prevented by proper treatment, and cases thus originating, will be included in my description of lateral curvature generally, but by many writers on spinal curvature, all such cases are absorbed into the class of lateral curvature, of which they are described as the first stage, and magnified into an undue importance. The result is, that they are very unnecessarily submitted to a long course of treatment required only by cases of actual curvature. I have witnessed many examples of this kind, and have taken off from young ladies heavy spinal instruments which were being most sedulously attended to, and these cases have since progressed favourably under constitutional treatment, combined

with gymnastics and partial lying-down, which such cases alone require. No doubt these cases yield abundant *cures* under any and every method of treatment, and there can be as little doubt that the much-vaunted *cures of spinal curvature* have been largely derived from this class of weak spines, a curvature being assumed where no real curvature existed.

Proceeding now with the description of cases of undoubted curvature of the spine, let us first trace the

EXTERNAL CHARACTERS IN CASES OF SINGLE CURVATURES IN DIFFERENT REGIONS, AND IN CASES OF DOUBLE CURVATURE.

Several forms of lateral curvature of the spine, as judged of by the more obvious external characters, are generally described in books, the most frequent arrangement being into *single curves* and *double curves;* the single curve generally existing in the lumbar, but sometimes in the dorsal region, and occasionally involving both the lumbar and dorsal regions; the double curve generally consisting of a deviation to one side in the dorsal region, and a deviation in the opposite direction, the lumbar region, so that one curvature *compensates* for the other with more or less mechanical accuracy.

Triple curves, *Quadruple* and *Quintuple curves* are also described by those who aim at further refinement. In reference to the division into *single and double curves*, it is only necessary to observe that anatomically it is impossible that any such condition as a single curve can exist in the spine, so long as the individual is able to maintain the equilibrium of the body and keep the erect position; at each extremity of the so-called single curve, a return curve, or deviation in the opposite direction must take place, though this may not be very obvious externally; however, as we certainly have the external appearance of single and double curves, and as the terms are well understood, there is some advantage in retaining them for descriptive purposes.

Other writers more frequently speak of *primary* and *secondary* curves, or as the latter are frequently called the *consecutive* or *compensating* curves, the secondary curve being supposed to take place after the primary curve, as a mechanical compensation for the latter; but I doubt whether it can rationally be inferred, or in any way demonstrated by cases, that a second curvature takes place after the first is formed; to me it appears that both curvatures take place simultaneously, or very nearly so.

It is evident that, as soon as a curvature begins to form, say in the lumbar region, the necessity for a second curvature immediately exists, for the purpose of maintaining the equilibrium of the body, and I believe such a curve as quickly begins to form. The rate of increase, however, will vary according to a variety of circumstances, and ultimately the appearance presented will approach more or less towards either the so-called double or the single form of curvature, and this will depend very much upon the equal or unequal length of the curves formed. I would direct more attention than is generally given to the inequality in the length of the curves, because, in proportion as one curve increases and predominates, so the external deformity increases, and with it frequently the more severe symptoms, affecting the general health. Three or four short curves, of about equal lengths, and, therefore, mechanically counterbalancing each other, may exist in a spinal column without producing more than very slight external deformity, as in the specimen I now exhibit to you; but, if two curvatures of unequal lengths should exist, the longer curve is sure to increase with greater rapidity than the shorter, and must necessarily give rise to external deformity, as well as cause displacement of internal organs. The external characters will vary, then, according to the form and situation of the curvature.

EXTERNAL CHARACTERS IN SINGLE LATERAL CURVATURE.

When *a single curve* (I continue to employ the term with the explanation above given) *exists in the lumbar region*, and also involves, as it generally does, the lower dorsal vertebræ, *a prominence of the hip*, corresponding to the concavity of the curve, is the most conspicuous external indication, and is itself diagnostic of this form of spinal deviation, as represented in Fig. 1. I have frequently been requested to examine young ladies simply on account of a prominence of one hip having been observed, perhaps by the dressmaker; at the same time being assured by the mother "that the spine is perfectly straight." Now, in these cases, the *crest of the ilium becomes prominent* simply on account of the abdominal walls in the lumbar region sinking in as a result of the curvature of the

FIG. 1.

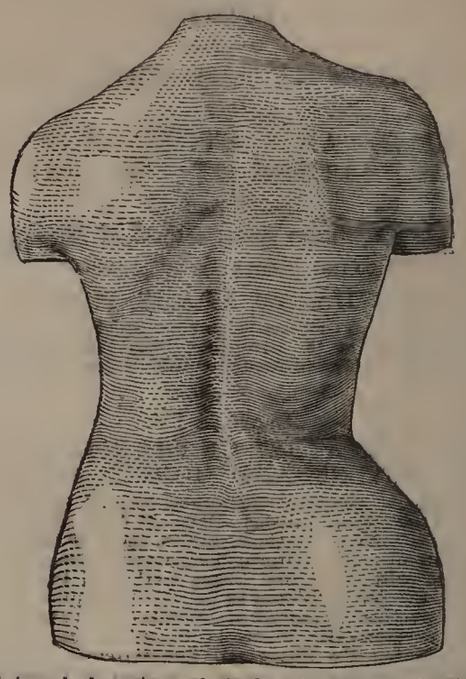

FIG. 1.—External characters of single curvature in lumbar region—Prominence of hip—Depression in the loin on one side, and increased prominence of spinal muscles on the opposite side.

spine in this region, *the depression* or receding of the abdominal walls corresponding to the concavity of the curve; whilst, on the opposite side to the depression, and corresponding to the convexity of the curve, *an increased prominence of the spinal muscles*, especially the sacro-lumbalis and longissimus dorsi, takes place. The depression on one side and prominence on the other, essentially depend upon rotation of the lumbar vertebræ, the effect of which is to alter the relations of the transverse processes, causing these processes to project posteriorly on one side, *i.e.*, on the convexity of the curve—and in this movement the spinal muscles are thrust outwards—and to recede inwardly on the opposite side, *i.e.*, on the concavity of the curve, in consequence of which a prominence of the hip, or, more correctly speaking, of the crest of the ilium, is produced. The diagnostic value of the prominence of the hip in these cases was especially insisted upon by my late respected friend and colleague, Mr. Lonsdale (a).

A lateral deviation of the apices of the spinous processes also generally exists in this form of curvature, but frequently only to a slight extent, for reasons which I shall presently explain, and seldom in any very marked degree; the prominence of the hip, however, first and principally attracts attention. A disposition to sit awkwardly, with an occasional falling of one shoulder, may have been noticed, but this is by no means constant.

When *a single curve exists in the dorsal region* it generally involves a considerable length of the spinal column. The curvature is most conspicuous about the central, or the central and lower portions of the dorsal region; but, in a severe case, the whole of the dorsal, and two or three of the lumbar vertebræ, are involved in one large curvature, as represented in Fig. 2. The symmetrical form of the body is more disturbed in this than in any other so-called variety of lateral curvature, in consequence of the length of the curve, and its relation with the thoracic parietes.

The level of the shoulders is conspicuously altered, even when the curvature is slight, and as it advances, *one shoulder becomes permanently elevated and the other depressed.* When attention is first directed to the inequality in the level of the shoulders, it is thought to be only a habit of the girl to raise one shoulder in consequence of the make of her dress, *i.e.*, from the shoulder-strap slipping off, etc; but, in such cases, the so-called habit will generally be found to depend upon a slight spinal curvature in the dorsal region.

(a) "On Lateral Curvature of the Spine." By E. F. Lonsdale. Second Edition. Page 46. London: Churchill. 1852.

A prominence of the scapula, corresponding to the convexity of the curve, always exists, and in many cases this is the

Fig. 2.

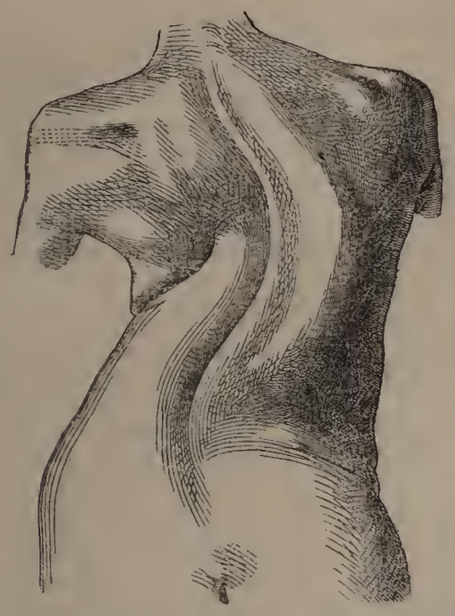

Fig. 2.—External characters of single curvature occupying the entire dorsal region—Elevation of one shoulder and depression of the other—Prominence of the scapula and ribs on side of convexity of curve—ribs increased in obliquity and depressed in concavity of curve—chest deformed.

indication first observed. *The scapulæ* will also be found *unequally distant from the spinous processes*, that on the convexity being more distant than the other, and also raised above the level of the opposite bone.

A posterior projection of the angles of the ribs, on the side corresponding to the prominent scapula, and a depression of the angles of the ribs on the opposite side—depending upon rotation of the vertebræ—also constantly exist, and as the curvature increases becomes one of the most conspicuous of the external characters.

The ribs also become more oblique in their direction, and depressed laterally as well as posteriorly in the concavity of the curve, so that the chest sinks in, and becomes obviously deformed; on the convexity of the curve the ribs are more horizontal in their direction, and more widely separated from each other, than in their natural condition.

The apices of the spinous processes present a more marked lateral deviation in this than in any other form of curvature, though, even in severe cases, they afford but a very imperfect indication of the extent of the internal curvature as affecting

Fig. 3.

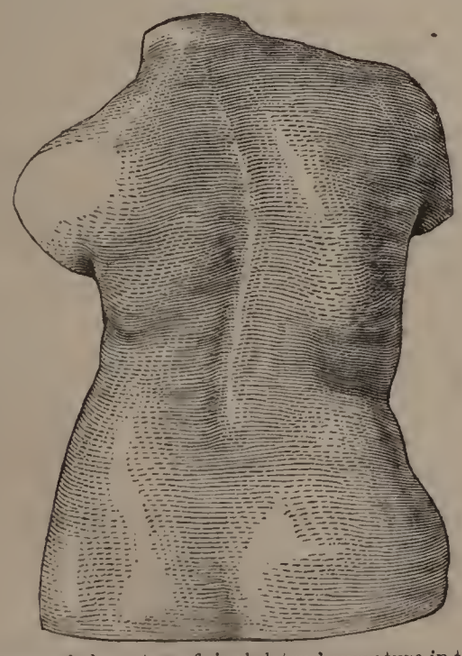

Fig. 3.—External characters of single lateral curvature in the upper and middle dorsal region.—High-shoulder and short neck—trapezius muscle prominent and scapula tilted forwards.—Shoulders unequal in height.

the bodies of the vertebræ. In slight cases the lateral deviation of the spinous processes may be scarcely perceptible, though the other external characters are sufficiently well marked.

When a single curve exists in *the upper and middle portion of the dorsal region*, it gives to the individual a high-shouldered and short-necked appearance, and produces a disposition to stoop, as represented in Fig. 3. The scapula on the side of the convexity is tilted forwards, and the portion of the trapezius muscle just above the scapula is often very prominent, so much so as to be occasionally mistaken for fatty or cystic tumour or chronic abscess. In one case sent to me from the country, the Surgeon had desired to open this supposed cystic tumour or chronic abscess. The same error in diagnosis I have know occur in several cases in which the lumbar muscles have been remarkably prominent; and I would here only observe that all such muscular swellings convey to the touch a doubtful sense of fluctuation, which it is as well to be aware of. *The shoulders* are unequal in height, one raised and the other depressed, and the chest sinks in at the upper part, a little below the axilla, on the side of the concavity.

External characters in double lateral curvature.

When a double curvature of the spine exists, one curve usually occupies the dorsal region, and presents its convexity to the right side, and the other the lumbar region, with its convexity to the left side. The deviation to the right side in the middle dorsal ragion, as compared with the deviation to the left side, occurs in the proportion of seven to one, according to Bouvier (b). When these curves are only of moderate extent, and *about equal to each other in length*, so as to balance each other, as it were, and preserve the equilibrium of the body, *very little external deformity* exists—much less than in either of the single curves above described. The level of the shoulders is not disturbed, and therefore the girls do not sit in the same awkward way as in the other forms of curvature when one shoulder is higher than the other and the body twisted. Such curvatures are frequently unaccompanied by pain or other symptoms, and therefore allowed to become comparatively severe before the Surgeon is consulted.

Young ladies having this form of curvature, even in rather a severe degree, pass very well in society, and are able to wear moderately low dresses without any notice being attracted to the existence of the deformity; the skill of the dress-maker easily concealing such defects in the figure when slight, as represented in Fig. 4. A Medical examination will,

Fig. 4.

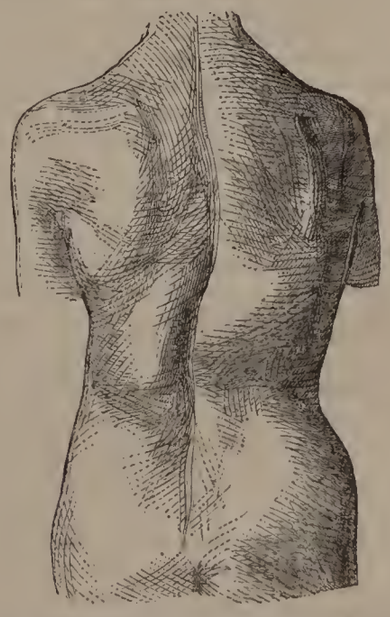

Fig. 4.—External characters of double lateral curvature of the ordinary form, with prominence of right shoulder and right hip. Slight lateral deviation of spinous processes. Depression in right loin and prominence of muscles in left loin. Chest not much affected. Level of shoulders not disturbed.

of course, detect the anatomical deviations characteristic of the deformity.

(b) "Dictionnaire de Médecine et de Chirurgie Pratiques," t. xv. à Paris: 1836. Art. Vertebrale.

The lateral deviation of the apices of the spinous processes is often very slight, even when the curvature, as affecting the bodies of the vertebræ, is rather severe, and affords no safe indication of the extent of the mischief, as I shall hereafter explain. But the *natural posterior projection* of the spinous processes in the dorsal region is *either diminished or lost*, so that *a flattening* exists instead of a convexity, and, in some more severe cases, the spinous processes are depressed in the middle dorsal region, so that the natural curvature is to some extent reversed. This I regard as one of the worst features such a case can present.

The scapulæ will be found unequally distant from the spinous processes in these cases, when of moderate severity, the angle of the right scapula being further removed than the left,—*i. e.* assuming the convexity of the dorsal curve to present to the right side, which it does in a very large majority of cases, and in some instances the angle of the right scapula will also be somewhat raised above the level of that of the opposite bone, but this is not so marked as in the other forms of curvature.

A posterior projection of the scapula, and a posterior projection of the angles of the ribs, upon which, indeed, the projection of the scapula essentially depends, are constantly present, on the convexity of the curve, in these cases in a degree proportionate to the extent of the internal curvature, or deviation of the bodies of the vertebræ.

A depression or sinking-in of the angles of the ribs in the concavity of the curve also constantly exists to an extent corresponding to the posterior projection of the angles of the ribs on the side of the convexity; and, as a consequence of this depression of the ribs, the angle of the left scapula often appears more conspicuous than natural, though not really projecting further backwards. I shall hereafter explain that a posterior projection of the angles of the ribs in the dorsal region, on the convexity of the curve, and of the transverse processes of the lumbar vertebræ on the convexity of the lumbar curve, is in each region a more certain means of diagnosing the extent of the internal curvature or deviation of the bodies of the vertebræ, than the lateral deviation of the apices of the spinous processes upon which it is customary for Surgeons to rely.

The form of the chest may not be perceptibly altered in these cases, when slight, but *generally the left breast is rather more prominent than the right*, and its aspect towards the left side rather than directly forwards. Sometimes it happens that the increased prominence of the left breast is the first thing noticed either by the girl or her mother, and on this account the Surgeon may be consulted; just as I mentioned to you that the prominence of the right hip was sometimes the cause of the curvature of the spine in the lumbar region being brought under the notice of the Surgeon.

The external appearances in the lumbar region are not generally very conspicuous, in cases of moderate severity such as I have been describing, but there is *some prominence of the right hip; i. e.*, corresponding to the concavity of the curve, and a *sinking-in of the right loin* in which the transverse processes of the vertebræ are felt at a greater depth than natural. There is also a *posterior prominence of the spinal muscles on the left side* (that of the convexity of the curve) and a general fulness of the left side of the loin, and to some extent of the lower ribs on this side. The spinal muscles are rendered prominent on the convexity of the curve chiefly by the posterior projection of the transverse processes of the lumbar vertebræ resulting from the movement of horizontal rotation of the vertebræ which always takes place in such curvatures; the muscles are thus pushed out by the deviation of the bones, and, as the muscles on the convexity of the curve are also thrown into action to resist increase of the curvature, their prominence is increased by their active tension.

Now, although all these anatomical deviations may exist in the dorsal and lumbar regions in a marked degree, and clearly indicate the extent and nature of the deviation as affecting chiefly the bodies of the vertebræ, *i.e.*, the internal curvature—yet, as I have stated, the general effect as regards the external form and figure, is frequently slight and easily concealed even when the spinal curvature is rather severe, and in this condition (the curves being about equal to each other as above described) when the general health remains good, no further increase of the deformity may take place; spontaneous arrest may be said to occur, and the affection remain *in statu quo* through a long life, but of this there is no certainty; a liability to increase remains and may occur at any period of life from failure of the general health, or from local causes, such as occupation, acquired habit of certain positions, etc.

When increase of the curvature occurs, then the curves no longer remain of equal size, and failing to counterbalance each other the equilibrium of the body is disturbed; the dorsal curvature generally increases to a much greater extent than the lumbar curve, and all the deviations above described become exaggerated—the scapula and the angles of the ribs on the right side project more posteriorily, and the right shoulder becomes disproportionately raised, and the left depressed to a corresponding extent. The lateral deviation of the spinous processes becomes more distinct, and often very considerable; but to this rule there are some remarkable exceptions. The form of the chest becomes altered, and in severe cases is much deformed; the ribs on the right side become flattened in their convexity, and bent upon themselves a little in front of these angles, varying very much as to their degree of separation, and their horizontal or oblique direction; the ribs on the left side become depressed with a very oblique direction downwards, so that the left side of the chest falls in, and a considerable hollow is formed; in the left pectoral region the ribs project anteriorly, and the prominence of the left breast is increased to a corresponding extent. The external deformity, therefore, becomes very considerable in such cases. The increase of curvature in the lumbar region, although taking place to a less extent than in the dorsal, is accompanied by a corresponding increase of the anatomical deviations described in the slighter cases. The sinking in of the right loin increases, and the transverse processes of the lumbar vertebræ are at too great a depth to be felt; whilst, on the left side, the prominence of the spinal muscles, and the general enlargement, increases; the transverse processes on the left side (that of the convexity) can often be distinctly felt, as they sometimes rise to the level of the apices of the spinous processes. The prominence of the right hip increases from the sinking-in of the loin, and becomes conspicuous, but, as the lumbar curve is very short, these deviations are not externally very conspicuous.

When the form and situation of the spinal curvature vary from those just described, the external characters are modified accordingly, but it will be unnecessary for me to enumerate in detail all such deviations.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON THE TREATMENT OF SUSPENDED ANIMATION UNDER THE INFLUENCE OF CHLOROFORM.

By WILLIAM MARCET, M.D., F.R.S.,
Assistant-Physician to the Westminster Hospital, etc., etc.

In the *Medical Times and Gazette* for July 20 I offered a few remarks on the phenomena attending the accumulation of vapours of chloroform in the blood, and insisted on the importance of watching the state of the respiration as well as that of the pulse during the exhibition of this anæsthetic agent. The number for October 28 of the same periodical containing two new cases of death from chloroform, I may be perhaps allowed to return to this subject, my present object being to suggest a mode of treatment in those cases which to my knowledge has not yet been proposed; and considering the failure which has nearly constantly attended every attempt to restore animation suspended by an overdose or under the influence of chloroform, the following suggestion will be most probably of interest, and also, I trust, of practical utility.

It has frequently occurred to me that, in many instances, the final cause of death from chloroform was owing, not only to its anæsthetic properties, but also partly to spasm of the glottis. I do not mean, however, that the passage of the vapour of chloroform through the glottis and larynx has the power of causing an involuntary closure of the glottis; and I cannot agree with Dr. Black, of St. Bartholomew's Hospital, who states, "Any concentration of the vapour of

chloroform which can be breathed is safe; any condition of dilution which causes the patient to cough or hold his breath is dangerous, and if persevered in for half a minute, may be fatal."(a) I believe a spasmodic closure of the glottis to take place occasionally from the action of the chloroform which has been absorbed into the blood, and that this obstacle to the admission of air into the lungs, taken in connexion with the narcotic or anæsthetic effect of the chloroform circulating in the blood, has been in some, perhaps many, cases the actual cause of death. Should this view be correct, it will follow that if air be allowed to enter the lungs by means of tracheotomy, or by opening the glottis with a trachea-tube, or any other operation which will effect the same purpose, life will in such cases be saved.

It may be inferred that spasm of the glottis takes place occasionally under the influence of chloroform.

1st. Because several substances possessing anæsthetic properties are positively known, when present in the blood, to have given rise to closure of the glottis.

2nd. Because the symptoms of death from chloroform are consistent, more or less, with death from sudden asphyxia.

3rd. Because the post-mortem appearances after death from chloroform may be accounted for by assuming that death has taken place from asphyxia.

In the three following cases, spasmodic closure of the glottis resulted from the presence of alcohol, carbonic acid, and sulphuretted hydrogen in the blood, the physiological properties of these three substances being allied to a certain extent to those of chloroform; and in two of the instances under our consideration, life was obviously saved by tracheotomy.

A very interesting case is reported in the volume of the Medico-Chirurgical *Transactions* for 1837, entitled, "Case of Recovery from the Insensibility of Intoxication by the Performance of Tracheotomy. By George Sampson, Esq." The patient, aged 31, was brought to Mr. Sampson's house in a state of complete insensibility after drinking freely of beer, and more than a pint of brandy; all voluntary motions had ceased for at least four hours. The stomach-pump being used, drew off between three and four pints of fluid, the greater part of which appeared to consist of brandy. Every means of exciting vomiting was afterwards vainly applied; the man became more comatose, his countenance turgid, and breathing more and more difficult; the pulse grew fainter, and was at last scarcely perceptible. He was then removed to the Infirmary, and a consultation was held with the other Medical attendants, who arrived in the course of half-an-hour; at that time every appearance indicated the rapid approach of death, and there was no ground to justify a reasonable hope of recovery. It occurred to Mr. Sampson when standing by the patient's bed-side that the extreme difficulty of respiration was owing to the existence of "collapse of the glottis," and with this view of the case, he strongly urged that a trial should be given to the operation of tracheotomy. The operation was accordingly performed, without loss of time, by Mr. Andrews. The trachea was no sooner opened, than the distension of the veins about the head and neck subsided, the violent efforts of the respiratory muscles ceased, and in about half-an-hour regular and easy respiration through the wound was freely established. At the same time the pupils became slightly sensible to the stimulus of light, and the pulse returned to the wrist. He continued quiet during the night, but had no return of consciousness till the following morning. The case proceeded very satisfactorily, and the wound being healed in about three weeks, the patient was discharged cured.

This case is particularly interesting, for the analogy between the physiological action of alcohol and chloroform has been quite satisfactorily demonstrated by Messrs. Lallemand, Perrin, and Duroy. Like alcohol, chloroform acts first on the brain, then on the spinal system, and finally on the sympathetic; the brain exerts a certain power of concentrating within its tissue both chlororom and alcohol; the period of excitement produced by chloroform, is not unlike that of alcoholic intoxication; and insensibility equally results when a sufficient dose of alcohol or chloroform had penetrated into the circulation.

If alcoholic poisoning is positively shown to have threatened life from asphyxia owing to spasm of the glottis, I see no reason why death from chloroform should not be due occasionally to the same phenomenon.

The two other cases I have to report have come under my own observation. One of them has already been published in this Journal (b). This was an instance of secondary asphyxia, from spasm of the glottis, after immersion in the Serpentine during the skating season. The patient, a middle-aged man, had been entirely under water, but on being taken out, respiration returned, and continued comparatively free until placed in a warm bath, when he suddenly exhibited alarming signs of asphyxia, obviously from spasmodic closure of the glottis. A few minutes later the patient was removed to a bed, when several similar attacks occurred, one of them still more severe than the first. He recovered in the course of some hours.

This is an instance of spasm of the glottis produced by an accumulation of carbonic acid in the circulation. The gas in question possesses anæsthetic properties, and is so far allied to chloroform.

The third case is one of equal interest, although the subject of the observation was a dog. About two years ago, when engaged in injecting an aqueous solution of sulphuretted hydrogen into the external jugular vein of a dog, I observed that the animal's respiration, instead of becoming somewhat deeper, as usually happens during this operation, began to fail, and shortly afterwards ceased, without there being the slightest struggle or apparent symptom of asphyxia from closure of the glottis. I immediately prepared to have recourse to artificial respiration by means of an instrument I have invented for that purpose, an account of which has been published in this Journal (c). In order to insert a tube into the trachea, I incised this organ, when immediately, to my surprise, the animal commenced breathing through the opening. After a few minutes free respiration and sensibility returned, and the animal recovered perfectly. It is obvious that, in the present instance, the respiration had been arrested by closure of the glottis, and the animal was dying from asphyxia; had not tracheotomy been performed, the dog would certainly have died with every symptom of syncope. This case, which I report from memory, was witnessed by many of the pupils of the Westminster Hospital. It shows two interesting facts:

1st. That the presence of an excessive quantity of sulphuretted hydrogen in the blood may cause death from spasm of the glottis; and, 2nd. That on those occasions death takes place without the struggles or convulsions so peculiar to impeded respiration. Consequently, in cases of death from chloroform, the absence of convulsions is no proof that there exists no mechanical obstacle to the free admission of air into the lungs.

The symptoms of death by chloroform are consistent with those of asphyxia. Dr. Snow's book contains a very interesting case of death from chloroform, with symptoms of asphyxia, which was communicated by Dr. Solly to the *Medical Gazette*. This case (No. 12) bears directly on the subject of the present communication. The patient, a porter, aged 48, and apparently in perfect general health, was submitted to chloroform for the removal of a toe-nail. The anæsthetic vapours were administered by means of an inhaler; after the operation had been performed, and being still insensible, the patient's face became dark, his pulse small, quick, but regular, respiration laborious; his neckerchief was removed and chest exposed to fresh air from a window near to the bed, cold water was dashed on his face, the chest rubbed, and ammonia applied to the nose. After struggling for about a minute, he became still, the skin cold, pulse scarcely perceptible, and soon ceased to be felt at the wrist. Immediately on the appearance of these symptoms artificial respiration was commenced by depressing the ribs with the hands and allowing them to raise again, until the proper apparatus was brought, when respiration was kept up by means of the trachea tube and bellows, and oxygen gas introduced into the lungs by the same means. Galvanism was also applied, but to no purpose.

Dr. Snow considers there is some obscurity about the above narrative, which I have given as nearly as possible in the same words as those used in the report; in his opinion the symptoms exhibited would be inconsistent with

(a) "On Chloroform and other Anæsthetics." By John Snow, M.D. P. 236.

(b) See the *Medical Times and Gazette* for February, 1857.

(c) See the *Medical Times and Gazette* for April, 1854.

death from chloroform. It appears to me, however, that this is clearly a case of asphyxia from spasm of the glottis under the influence of chloroform, and I cannot help believing that had tracheotomy been performed at the time when artificial respiration was commenced, the patient would have been saved. If most cases of death from chloroform are not attended with evident signs of asphyxia, still this is no argument in favour of the absence of spasm of the glottis, for it must be remembered that poisoning by chloroform is a complex phenomenon which results from excessive anæsthesia producing a tendency to paralysis of the muscles, and an action on the heart predisposing to death by cardiac syncope, any spasmodic closure of the glottis occurring under these circumstances would, it may be anticipated, cause sudden death without the occurrence of convulsions, or struggles for breath.

The post mortem appearances in cases of death from chloroform do not preclude the idea of death from asphyxia; indeed in cardiac syncope, which is according to Dr. Snow the fatal termination of poisoning by chloroform,—"If the blood have not been displaced by artificial respiration or other causes, the right cavities of the heart and the adjoining great veins will be found filled with blood and the lungs will in many cases be more or less congested. The appearances, in short, will be very much the same as in asphyxia by privation of air which ends in a kind of cardiac syncope."—Page 224. Nothing can be more in favour of the view I am advocating. It must be well understood that I do not consider every case of fatal poisoning by chloroform as owing to spasm of the glottis, and there is every reason to believe that in some instances death takes place from paralysis of the muscles of respiration, in others from cardiac syncope, or from a simultaneous occurrence of both these effects.

If it be admitted that death from chloroform be occasionally owing to spasm of the glottis, then the importance of performing tracheotomy in these cases, and adopting some means of allowing air to enter freely through the wound, will be readily understood. It must be remembered that the cases on record of recovery from suspended animation owing to an overdose of chloroform are very few, and, as a rule, it may be considered that, after the respiration has ceased, and the pulse become hardly perceptible at the wrist, death is inevitable. Under these circumstances, any means apparently available should be adopted. The operation of tracheotomy ought to be performed as soon as possible after the respiration has stopped, and the patient assumed that livid countenance known in these cases to precede death: the loss of every second diminishes the chance of saving life. Artificial respiration, if possible, must however not be neglected, and should be carried on before, during, and, if necessary, after the operation of tracheotomy has been performed. Artificial respiration is of great importance in connexion with death from chloroform, and I am at present busily engaged inquiring into this subject.

4, George-street, Hanover-square.

ON THE PATHOLOGY OF ASTHMA.

By H. HYDE SALTER, M.D., F.R.S., F.R.C.P.,
Assistant-Physician to Charing-cross Hospital.

(Concluded from page 478.)

In order to reconcile the undoubted existence of spasm of the bronchial tubes in asthma with Dr. Kidd's theory that asthma consists essentially in spasm of the muscles of inspiration, it is necessary to show that the bronchial muscles are muscles of inspiration. This Dr. Kidd undertakes to do principally from the fact that inspiration is so much longer than expiration. "If," he says, "it can be proved that the bronchial muscles are muscles of inspiration, it will afford a satisfactory explanation of their being associated with the other muscles of inspiration in the production of a fit of asthma. The principal fact on which this theory is founded is the difference between the duration of inspiration and expiration. On analysing our own sensation, or applying the hand to the chest of a healthy person, it is evident that the movement of expiration is much shorter than that of inspiration." The difference is such that Dr. Kidd concludes, from the data he has obtained, either that the expiratory force must be ten times stronger than the inspiratory, or the tubes must be contracted during inspiration; the former alternative not being true, the latter he (conceives) becomes inevitable.

Now, there is a third possible explanation of the relative length of inspiration in natural breathing, which in my opinion is the true one, and which Dr. Kidd has overlooked—it is, that inspiration is an antagonized force, and expiration is not. At the time that the inspiratory muscles are distending the chest they are doing so in opposition to the elastic contractility of the lungs and resiliency of the parietes, whereas when these two last named forces empty the chest, they are unopposed and achieve the act at once. The two acts of respiration find, in this respect, an exact analogy in rolling anything up hill and then down again; and to say that because expiration is so much shorter than inspiration, the expiratory force must be so much stronger than the inspiratory, is like saying that the force that rolls a stone down hill is greater than that which rolls it up, because it is rolled up slowly, and rolled down quickly; whereas we know that the force that rolls a stone up hill must be greater than that which would roll it down (gravitation,) because it antagonises it and overcomes it. In the same way the inspiratory force must be stronger than the expiratory, because it antagonises it and overcomes it; and yet it acts more slowly. The elastic contractility of the lung is, like gravitation, a constant force acting in one direction, and anything that effects a movement in an opposite direction must do so in direct antagonism to that force, and because it is stronger than it and overcomes it; and thus the force that enlarges the chest is not the inspiratory force *per se*, but the excess of the inspiratory over the expiratory force. The force of expiration (elastic contractility of lung) is as much in operation during inspiration as at any other time, indeed more, becomes increasingly powerful as inspiration proceeds, because the more the lung is expanded the more does its elastic reaction come into operation, so that the expiratory force has acquired its greatest intensity at the end of an inspiration. Inspiration is a contest of two opposing forces in which one gets the better; but its mastery is not for a moment uncontested. Expiration is the unopposed action of a single force. The arm that pulls a bow is stronger than the bow, but the recoil of the bow takes much less time than the bending it. Only in this way, by bearing in mind the co-existence of two opposing forces in inspiration, the constancy of the expiratory force, and the intermittentness of the inspiratory, can, in my opinion, the physics of the inspiratory movements be correctly comprehended. But once clearly understand and admit this, and all necessity for excess of expiratory force as an explanation of rapidity of expiratory movement ceases.

The mode in which Dr. Kidd conceives the contraction of the bronchial muscles would assist inspiration is as follows:—"The object of inspiration is to carry a current of air into the air-cells. This is effected by enlarging the cavity of the thorax relatively to its contents:—1st. By dilating the cavity. 2nd. By lessening the bulk of its contents. This latter is effected by the bronchial muscles, which narrow and shorten the bronchial tubes, leaving extra space for the enlargement of the air-cells. The narrowing of the tubes assists inspiration materially in another way. Though in ordinary respiration there be but twenty cubic inches of air introduced into the lungs and expelled again, we know that in health a quantity of air remains in the lungs after ordinary expiration, varying in different subjects between 117 and 430 cubic inches. The greater part of this is lodged in the air-cells, under circumstances most unfavourable for its displacement. By the narrowing of the tubes the displacing force of the current will be greatly increased, and thus important aid given to the essential part of respiration."

This increasing of displacing power, or the existence of a displacing action at all on the part of the inspired air, I must confess I cannot comprehend. The air is drawn into the air-cells from the bronchial tubes because the cells expand, and the amount of expansion of the cells entirely regulates the bronchial current. No more air can be drawn in than would fill the cells. And if the air *were* displaced from the cells, where could it go? Into the bronchial tubes by which it is at the same time arriving? That would be to suppose two co-existing currents in the bronchial tubes, and that some of the air is setting outwards at the time of inspiration. But in reality the thing is impossible; and the idea can only be based on the supposition that the air is driven, and not drawn, into the air-cells. If we imagine an artificial imitation of the conditions, by placing in an air-pump an expansible bag communicating by a tube with the outer air, we shall immediately

perceive that the enlargement of this bag by exhausting the pump would be attended with a simple in-rush of air, that there could be no displacement, merely an increment, and no counter-current.

The other supposed inspiratory purpose of contraction of the bronchial tubes, viz. that by diminishing the volume of air in the tubes it would increase that in the cells, I admit as theoretically possible; but I cannot admit that it would countervail the great increase of obstruction to inspiration that the contraction of the tubes would involve. In proportion to the contraction of the tubes would be the increased rapidity of the inspiratory current, and Dr. Kidd has himself shown to how great a degree increased rapidity of current increases resistance.

In support of the view that asthma depends on an irritation existing in the nervous centres, Dr. Kidd quotes my observation, that in asthma there is an itching sensation at the sternum and chin, and between the shoulders. Now, I must ask, What is the cause of the sense of soreness in the same situation (the sternum and interscapular region) in bronchitis? Is it subjective? Is it central? Or is it reflex, and dependent on a certain condition of the bronchial tubes? And if this last in the one case, why not in both? If in bronchitis, why not in asthma? I have fully discussed in my book the question of this sensation, and believe it to be a very interesting example of what appears to be the law of visceral sensation, viz. that when a viscus is thrown into such a condition as to give rise to a sensation, that sensation is transferred to the superficies in the middle line, at a level corresponding with the irritated viscus. In bronchitis, the tubes are inflamed, and the sensation is soreness; in asthma, they are the seat of spasm, and the sensation is itching.

That asthma may be produced, and is in some rare cases produced, by central irritation, I have not the smallest doubt. I have instanced examples in my book in which such was clearly the case; but that goes no way to show that it is the sole and essential pathology of the disease, nor that the inspiratory muscles are involved; nor that spasm of the bronchial tubes is inadequate to the complete solution of all the phenomena.

Whenever I meet a tenable objection fatal to the bronchial-spasm theory of asthma, I will willingly and at once renounce that theory; but I must confess that I do not think that Dr. Kidd has succeeded in touching it, nor have I yet, in any direction, become acquainted with any other theory that so well accords with all the clinical phenomena, or that is not open to insuperable objections.

I would at all times much rather state my opinions in a constructive than a destructive form, I would rather be simply didactic than argumentative, and anything like scientific polemics is very distasteful to me. If I could have expressed my opinions otherwise than as antagonistic to Dr. Kidd's I would have much rather done so, but sometimes one is hardly conscious of the arguments in support of one's views till those views are assailed, nor does the necessity of even stating them enter one's head till something opposed to them is broached. Moreover, in the present paper I have been really anxious not only to enforce the bronchial-spasm theory of asthma, but to refute views both pathological and physiological, which I believe to be erroneous.

6, Montague-street, Russell-square.

CASE OF

PURPURA HÆMORRHAGICA, SUCCESSFULLY TREATED WITH TINCTURE OF THE MURIATE OF IRON.

By JAMES WOOD, L.R.C.P.E.

I was called in to visit M. B., aged 14 years, on the 3rd inst. Her complexion is fair, with ruddy cheeks, and her general conformation rather delicate. Family history bad. Mother and father both died of phthsis, as also some uncles and aunts. The patient has never menstruated. Her health has been pretty good, but for the last fortnight she has complained of feeling weak and languid, being indisposed for exertion of any kind. A cough came on a fortnight ago which has disturbed her a good deal at night. There has been very little if any expectoration with the cough; believes she caught cold, since which she has been getting gradually worse. She states she has no pain in her chest, but there is a sense of dull uneasiness in the lower sternal region, not amounting to actual pain. Pulse 132; tongue coated with a thick layer of yellowish-white epithelium. Has never vomited, but feels nausea.

On examining the lungs, nothing unusual was discovered, with the exception of a little mucous *râle* in the posterior and lower aspect of each. Percussion sound not perceptibly altered. She has been living in a large town, at some distance from her native place, a healthy country village, and has been subject to be much confined in-doors, her employment having been that of a domestic servant.

A blister was ordered to be applied to the chest, over the seat of uneasiness, and a cough mixture prescribed, containing squills and compound tincture of camphor; also a pill at bed-time for three nights, consisting of pil. hydrarg. gr. j., pil. rhei. co. gr. ijss.

On visiting her two days afterwards she expressed herself as relieved in her chest, uneasiness less; her breathing more free; but she mentions having bled at the nose to a considerable extent on two occasions since my last visit, and that she feels weaker.

Two days after I again saw the patient, and found that over her arms, neck, and face, a "rash" had made its appearance, which rash proved on inspection to be petechiæ. The spots varied in size, but the average measurement would be about four or five lines in diameter. Their colour was a dark purple, inclining almost to black. The spots were not confined to arms, face, and neck, but existed also on the legs, chest, abdomen, etc. Pulse still 130 per minute; tongue much as at my first visit. Patient mentions having again bled at the nose, and had also expectorated a little blood, about a teaspoonful; and had, moreover, passed something very dark in her urine. I at once saw that she had hæmaturia, which had at least been going on for some hours. From the amount of pain complained of in the iliac and lumbar regions of both sides, I concluded the blood had come from the kidneys or the ureters in the neighbourhood of the kidneys. The quantity of blood mixed with the urine must have been considerable. The patient's appearance had now much changed, she looked pale and anæmic, and complained of great weakness and general prostration.

Thinking this a favourable case for the trial of the tincture of the muriate of iron, so highly spoken of by some French Physicians, I prescribed two drachms of it in an eight-ounce mixture, of which a tablespoonful was to be taken every two hours. Diet to consist of good fresh meat, mutton or beef, with beef-tea, and bitter beer after dinner. She now informed me that she has not eaten meat for a length of time, because she has had no relish for it. On my explaining to her the necessity for it, she consented to try to eat it, and drink beef-tea. On the day following the bleedings had ceased, her urine was clear, and quite free from any semblance of blood; her appetite, too, was better. She had eaten a few mouthfuls of meat, and had drank a good deal of beef-tea. Pulse still keeps high, and the petechia are the same in appearance as described above. Two days later the improvement noted as having began at my last visit continued to go on steadily, and the patient expresses herself as much better. Her appetite is increasing, and her tongue fast cleaning. Pulse lowered to 100; hæmorrhages have not recurred.

From this time the patient steadily, gradually, and I may say quickly progressed towards recovery. In a few days more the spots had nearly all disappeared, her strength and appetite increased rapidly, and the pulse came down to 85 beats per minute—a striking alteration.

From the foregoing facts I think it is quite evident that, in this case at least, the patient owed her rapid and good recovery to the muriate of iron mainly, and though I am disposed to believe that the change in the diet was no mean adjuvant in her case, I am satisfied that the iron was the chief cause of the alteration in the state of the patient's blood, or capillaries, or both, which led to the re-establishment of her health. Within twenty-four hours after taking the first dose the hæmaturia had entirely ceased, and the epistaxis and hæmoptysis did not recur. The effect of the iron on the stomach and tongue was no less observable than in the case of the hæmorrhages, for the appetite and tongue improved perceptibly soon thereafter.

Kirkby Overblow, Yorkshire.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

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AND BY

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SYPHILITIC AFFECTIONS OF THE NERVOUS SYSTEM.

(Continued from page 457.)

CASES OF AMAUROSIS IN CONNEXION WITH SYPHILIS.

In reporting on affections of the special senses due to syphilis, we are met in the beginning by the difficulty of ascertaining whether the defect is due to syphilitic disease of the brain, or to lesion of the apparatus of the senses. For instance, in a case of "amaurosis," when the cornea is clear and the iris bright, we are not sure whether it is due to apoplexy of the fundus, local inflammation of the choroid, or whether the slighter defects of sight, which might be called "incipient amaurosis," are not due to some dioptric defect (as hypermetropia), which the patient, being ill, is unable to overcome as he could when in health. This, of course, can by the proper means be ascertained, and by the ophthalmoscope most of the difficulties will be cleared up. In the very great majority of cases of "amaurosis," something visibly wrong in the fundus is found by the ophthalmoscope. In the cases of amaurosis due to syphilis, which we are going to relate, we exclude all those which are due to local syphilitic inflammation, as choroiditis, etc. A series of cases of this kind are now being published in this Journal. It is highly probable that the optic nerve is liable to syphilitic neuroma as well as other cerebral nerves. In all the cases of loss of vision which we are going to relate, dependent on, as we believe, cerebral disease induced by syphilis, there was that condition of the optic disc, white and anæmic, which is now fully recognised as a common (ophthalmoscopic) condition. This form of amaurosis being probably the kind denominated "gutta serena" by older writers. In these cases, then, we might suppose that possibly there was some neuroma of the optic nerves near to their entrance into the eyes which would interfere with the circulation by mechanical pressure; but in some of them the suddenness of the attacks prevents such an hypothesis from being tenable. In one, Mr. Lane's case, the loss of sight appears to have been in a moment Our readers will be aware that Mr. Lee has drawn attention to cases in which he believed disease of the cranial bones has by reflex irritation produced various forms of paralysis; and he kindly, at a recent visit to the Lock Hospital, in Mr. Lane's absence, directed the writer's attention to the case mentioned as one, he believed, of amaurosis from reflex irritation. On examination of the eye by the ophthalmoscope, the optic discs were found to be quite white and the blood-vessels were small, just the condition which would confirm that hypothesis. Before the introduction of the ophthalmoscope it was a common practice to subject amaurotic patients to a course of mercury, and in many of them with success. The reason stated for giving mercury in these cases was that there was some thickening of the membranes of the brain or some effusion pressing on the optic nerves. Very likely in many of them there was syphilitic choroiditis, so that the "amaurosis" got better because the syphilis was cured. But in cases dependent on atrophy of the optic nerves, which condition it would then have been next to impossible to diagnose, it is more likely that, as a rule, a course of mercury would have done harm. Yet, as the following cases will show, this form of amaurosis does sometimes occur in connexion with syphilis, syphilis being here, however, probably the indirect cause of the amaurosis, producing it by setting up excentric irritation from some organ not connected with the optic tract. We intend in a future series of Cases of Diseases of the Cerebellum to draw attention to some in which amaurosis has been an attendant symptom, probably, as Dr. Brown-Séquard supposes, from some excentric irritation causing contraction of the blood-vessels of the optic nerve. We shall now place before our readers the following particulars of cases of amaurosis occurring in connexion with syphilis, leaving the question as to whether this form of amaurosis is reflex or not. It might be objected that, as we suppose the syphilis is not the direct cause of the loss of function, that is, does not produce syphilitic disease of the retina, choroid, or optic tract, but only indirectly by producing some remote alteration causing excentric irritation, that these cases belong rather to general disease of the nervous system, and need not be grouped together under the head of syphilitic affections of the nervous system. It is, however, of so great importance always to keep in view the first link in the chain of morbid processes, that we prefer to report them as cases of amaurosis due to syphilis, rather than as amaurosis the result of reflex irritation. And this object, so important in reference to treatment, is the one we have chiefly had in view. For instance, in recording the cases of epilepsy (which it would have been much better to have called cases of convulsive affections) in association with syphilis, our object was not so much to discuss the convulsive seizure, as to point out that such seizure occurred in connexion with syphilis, and thus that the important point, the treatment, should be directed, not to the convulsive disease, but to the syphilis. In several cases it was clear that the disease depended on some evident lesion. In others, as, for instance, Case 7, it might be said that epilepsy supervened, not on a local lesion caused by syphilis (as discase of the cranial bones or membranes), but on some general cachectic condition. When, however, we find that the convulsive affection was on one side only, and that there were evident structural lesions in external parts, as the eye, the probability is great that somewhere—most likely as in Cases 6 and 2, and also in the case we are about to relate—on the surface of the brain there was some structural intracranial change.

Case 1.—*Congenital Syphilis—Notched Central Upper Incisors—Atrophy of the Optic Nerves—Subsequent Attack of Kerato-Iritis.*—The following is a case of atrophy of the optic nerve occurring in a boy the subject of congenital syphilis:—He came under the writer's observation on July 12, 1861, when he was admitted, under Mr. Dixon's care, for complete blindness. He had the form of teeth—notched central upper incisors—which Mr. Hutchinson considers to be certain evidence of the existence of hereditary syphilis, and from this alone, at the first, the diagnosis was made. Independently of this, however, there is, to render this diagnosis certain, his family history, and also an attack of kerato-iritis which has commenced since he attended at the Hospital. Again, as is almost invariably the case, he is the eldest child. His mother had had two miscarriages. For six weeks, when an infant, he had a rash, and was treated by powder, and when one and a-half years of age he had "convulsive fits," three or four a-day, for a period of two months. He has never been sharp, his head is large, and he is perverse and stupid. He did not walk until two years of age.

When admitted he could, he said, not see at all, but it was probable that he could just count fingers. He had been blind about five months. He had, well marked, the condition known as atrophy of the optic nerves, anæmic and white, and abruptly margined. No traces of inflammation of the choroid or iris. The eyes oscillated very much. The boy is now attending, under the care of Mr. Hutchinson, for the kerato-iritis, which has come on since his admission.

The following is a brief note taken at a visit to the Lock Hospital about two months ago. The patient has since been trephined. The case will, we are informed, be shortly published in full.

Case 2.—*Acquired Syphilis—Necrosis of the Frontal Bone—Atrophy of the Optic Nerve.*—Sarah B., aged 26, was admitted, under the care of Mr. Lane, for necrosis of the frontal bone and complete blindness. The history of the patient is briefly this:—The patient, unmarried, had been living with a man for seven years. She says that the man, during her first pregnancy, gave her "the disease," but she says that she never had any local primary symptoms. She appears, however, to have had secondary symptoms, and shows the scars of old serpiginous

ulceration. She has had four children. The first is living and healthy; the second died at the age of two and a-half years of "inflammation of the chest" and the "hooping-cough;" the third at the age of nine months of "hooping-cough." The fourth is a baby, said to be healthy, born about five months before. For twelve months she had had necrosis of the left side of the frontal bone a little above and implicating the frontal eminence, a piece of dead bone about the size of a half-crown being exposed. For some time before she had had pain and swelling in this position. The blindness came on suddenly about five weeks after her last confinement. She was out of bed (being confined to her bed during the day by "debility," there being no history of special symptoms) one evening, between five and six o'clock, on trying to get into bed, she had to feel her way. She soon became quite blind, and asserts that next day she could not see even the light. She says that her sight before was very "strong," and that she never had inflamed eyes. The pupils now, May 30, are much dilated, and not affected by the light of the ophthalmoscope at all. There is no corneal opacity, and no traces of adhesion of the iris. The optic discs were quite white, and the vessels were small. The rest of the fundus looked as red as natural.

This is one of those cases which might be justly called paralysis of the optic nerve; not that it is primarily paralysis of the nerve, but probably loss of function from impaired nutrition consequent on deficient supply of blood. Be it what it may, it is *sudden* loss of sight occurring in a syphilitic patient, without any evidence of local disease in the eye, such as is generally recognised as syphilitic. So that, as was said, it seems fair to conclude that, if there is such a thing as reflex amaurosis, this was probably the result of some reflex irritation. Whether the irritation proceeded from the disease of the cranial bone or from some disease within the cranium is doubtful. Whatever it was, it was no doubt the result of syphilis. It could not have been a tumour, as there would have been, at all events, some gradual failure before the total loss of sight.

In a series of Cases of Epilepsy, recorded in our Hospital Reports for July 20, 1861, are given particulars of a case (Case 11) of amaurosis and epilepsy, in connexion with syphilis. There was the same condition of the optic nerve-entrance as found in the above two cases. This patient attended at the Hospital a few days ago. He was still quite blind with one eye; but the other, under antisyphilitic treatment, had improved. In another series of cases in this Journal for Nov. 2, 1861, we gave the outline of a case published by Dr. Thomas Read, of Belfast, in which amaurosis was one of the symptoms. There was then (1847) of course no ophthalmoscopic examination, and there may have been actual syphilitic inflammation of the choroid. There was paraplegia, difficulty of articulation, and mental hebetude, symptoms not infrequently attendant on the form of amaurosis due to atrophy of the optic nerves. We may remark, that the association of this form of amaurosis with paraplegia is not very uncommon. There are now attending Dr. Brown-Séquard's out-patients' room two patients suffering from this form of amaurosis supervening during the course of paraplegia. A patient lately died under the care of the writer, who had, except the hemiplegia, all the cerebral symptoms mentioned in Dr. Read's case; and in this, too, the amaurosis depended on atrophy of the optic nerves.

Case 3.—Amaurosis and Tendency to General Paralysis from Syphilitic Affection of the Brain.—Harriet W., a female servant, aged 20, was admitted into St. Thomas's Hospital, under the care of Dr. Peacock, on November 28, 1860. She then stated that she had been suffering from "rheumatic" pains for about two months; but that she had previously had good health. She complained of pain in the left shoulder and arm; had a somewhat quick pulse and dry skin, and the bowels were confined. Soon after her admission a papular eruption made its appearance on her face, chiefly in her forehead, and this, subsequently, took the form of tubercular syphilis, and was followed by the appearance of small elevated mucous sores on each tonsil. When admitted she was directed to take three grains of the iodide of potassium, with liq. potassæ, and a small dose of tincture of colchicum, in decoction of bark, three times daily, and the dose of iodide of potassium was increased to four grains on December 3, and to five on the 6th.

On the 17th the dose of the iodide of potassium had been increased to eight grains three times a-day, and five grains of Plummer's pill were directed to be taken each night.

At the end of December, 1860, while she still continued to complain of the rheumatic pains, and had the sores in the tonsils, her sight became much affected. The pupils were excessively dilated, and her mind somewhat fatuous; but on January 10, so far from having derived any benefit from the treatment, she had become more amaurotic and more fatuous. The iodide had been gradually increased to ten grains, and the Plummer's pill was still continued. She was, therefore, directed to take two grains of quinine twice a-day, and on the 17th three times a-day, and a blister was applied to the back of the neck.

January 24.—She is blind, being only capable of distinguishing objects very imperfectly. Both pupils are very much dilated, but equally so, and the right eye in rest is somewhat everted, though it appears to move well with the other. When she attempts to walk, her gait is excessively tottering, and the expression of her countenance is at all times vacant. The eruption on the skin was much less distinct, and the mucous sores also are much smaller and project less. To omit the other medicines and take quinine and iron.

February 21.—She did not improve materially under the use of the quinine and iron. After the addition (on February 4) of one-eighth of a grain of the bichloride of mercury, she began to improve, and can now walk much more strongly on her limbs, and her sight is improved. She can, however, only distinguish light with the right eye, and the outline of objects with the left. Her vision varies, being able at times only to distinguish light from darkness. The pupils seem less dilated, but are still very large, and are insensible to light. The expression of the face is less vacant, and she is decidedly more intelligent. The gums are somewhat spongy; there is still some remains of superficial ulceration on the tonsils. There is also some papular eruption on the face.

April 1.—Since the last notes were taken, she has improved very much, and has gained flesh and strength. The eruption on her face is entirely gone, and her complexion is much clearer. She is quite intelligent, and can walk much better. Her power of vision, however, is not improved, though she can occasionally distinguish objects with the left eye. Both pupils are very large and fixed, the left one rather the larger of the two. There is now no appearance of ulceration in the throat; her gums are spongy, and have been so for some time. She is still taking the same medicine (quinine, iron, and the bichloride of mercury).

From time to time she had attacks of sickness, vomiting, and feverishness, which were termed by the nurse "bilious." During these attacks she suffered much from severe headache, and was afterwards much prostrated; her sight was much impaired, and her muscular power diminished. On May 2 the specific treatment (the bichloride) was discontinued, and she only took the quinine and iron, and this was persevered with until her discharge on June 17.

It is to be regretted that this patient, contrary to the urgent recommendation of Dr. Peacock, left the Hospital. She was then in every way better, but died suddenly a few days afterwards. No autopsy could be obtained.

In this case there was no ophthalmoscopic examination; but the association with other symptoms of cerebral disease, and the fact stated in the case that the "sight varied," render it at least probable that the amaurosis was of the same kind as in the other cases.

J. H. J.

CHESTER GENERAL INFIRMARY.

SEVERE COMPOUND FRACTURE OF THE LEG—LACERATION OF THE LEFT KIDNEY—DEATH—AUTOPSY.

(Under the care of Mr. WEAVER.)

[Reported by Mr. HUGHES, House Surgeon.]

John W., aged 51, admitted November 1, with a severe compound comminuted fracture of the left leg. He had been knocked down whilst attempting to cross the line; the engine struck him on the left loin, and he was dragged a distance of twenty-five yards beneath the train. When admitted, he was quite sensible, and suffering but little from the effects of

shock. The foot was only attached by a portion of skin. A little warm brandy and water was given, and in about half-an-hour after he was placed under the influence of chloroform, and the leg was removed just above the knee. Not more than a few drops of blood were lost, and but one ligature was required. Sutures were not used, but the flaps were brought together by strips of adhesive plaster; an opiate was given in the evening. The following morning he passed about half-a-pint of very bloody urine—indeed, it was almost pure blood—and complained of pain in the loins. The pulse was 110; feeble. He was ordered stimulants, but he gradually sank, and died about five o'clock on the morning of the 3rd.

Autopsy, Thirty Hours after Death.—On opening the abdomen, some marks of blood were noticed on the bowels, but no traces of peritonitis. The right kidney was sound and healthy, but on examining the left it was found extensively lacerated on both its surfaces, and much blood had been poured out into the cavity of the abdomen, and into the cellular tissue surrounding the kidney, giving it the appearance of being much larger than its fellow. On removing this cellular tissue, three distinct lacerations were seen, and one of them extended completely through the substance of the kidney, to the extent of about an inch from its outer border. On examining carefully the lower false ribs, one of them was found to be broken, and from the appearance of the wound it is probable that it had been produced by the sharp fractured end of the rib having been forced into the kidney by the violence of the blow. All the other organs were healthy.

THE PROPRIETORS

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TO

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THE MEDICAL TIMES AND GAZETTE

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Medical Times and Gazette.

SATURDAY, NOVEMBER 16.

SIR JOHN FORBES.

John Forbes, Knight, M.D., D.C.L. Oxon., was born on October 18, 1787, at Cuttlebra, Banffshire, Scotland, and was the fourth son of Mr. Alexander Forbes. At the age of eleven, after the usual discipline of a village school, he was sent to the Fordyce Academy, where he remained three years. He then went to the Grammar School in Aberdeen for a year, after which (1805) he entered Marischal College, where he attended classes for three sessions. Subsequently spending a session at Edinburgh University (1806-7), he entered the Navy as Assistant-Surgeon in 1807. After the short period of twenty months, he was promoted to be Surgeon, and continued in active service until 1816. We have heard him refer with honest pride to his early promotion, as it was a reward for a Report on the Meteorology of the West India Station. In 1811 he held for three months the appointment of Assistant Medical Officer at Haslar Hospital. During the intervals of this period of public service, he returned to Edinburgh for the purpose of attending various courses of lectures, both Medical and Scientific, and where he finally graduated in 1817 as Doctor of Medicine. His inaugural dissertation indicated the leading bias of his mind; it was entitled, *Tentamen Inaugurale de Mentis Exercitatione et Felicitate exinde Derivanda.*

As Dr. Forbes, the retired Naval Surgeon, John Forbes now commenced practice as a Physician at Penzance, and at the same time devoted himself with zeal to scientific pursuits, but more particularly to the study of Geology and Climatology. In 1820, he married at Torrington, in Devonshire, Eliza Mary, daughter of John Burgh, Esq., H.E.I.C. She died in London, in 1851. His only child, a son (Alexander Clark Forbes), was born at Chichester in 1824, whither Dr. Forbes had removed the year preceding as successor to Sir William Burnett. He had a large practice there, and (as at Penzance), was an active supporter of all the local, charitable, scientific, and literary institutions. In particular he was mainly instrumental in establishing the Infirmary at Chichester. Some of the lectures he delivered before the Philosophical Society were published by request. It was here that he meditated and launched his two great enterprises the "Cyclopædia of Practical Medicine," and the "British and Foreign Medical Review." In 1840, he found it expedient to remove to London, where he continued the same vigorous habits of life, until in 1859, his failing health compelled his retirement from practice, and he then left London to reside with his son at Whitchurch, near Reading, where he died. He had the honour of Knighthood conferred upon him in 1853. On retiring from practice, he presented his large and valuable library to his *Alma Mater*, Marischal College, Aberdeen. Two years previously, in conjunction with Sir James Clark, he had established a library at Fordyce, where he had got his early education.

Whatever may be now thought of his merits, it is certain, we think, that the more John Forbes's character and labours are known, the higher will be his rank on the roll of fame. Taking him in all his relations, as a Scholar, at once scientific and accomplished, as a Physician, deeply read, learned, and practical, as a man of his Art, never wearying in his efforts to advance the social, material, and technical interests of his Profession,—it will not be easy to name his equal. Some British Physicians may have equalled, perhaps excelled him, in science, or in learning, or even one or two in extensive reading, but none, we believe, have equalled or excelled him in each and all.

A short notice of his chief labours (and this alone is practicable at present) will serve to show how far this opinion is well-founded. Many living Physicians can remember with what contemptous disregard the doctrines and art of physical diagnosis were first received in England. John Forbes introduced them into this country. The first edition of his translation of Laënnec's "Treatise on Auscultation and Diseases of the Chest" was published in 1831, the fifth in 1838, when at last the new method began to be more generally practised, and the diagnosis of pulmonary and cardiac diseases especially rendered more clear and certain, with incalculable advantage to practical Medicine. His "Original Cases Illustrating the Use of the Stethoscope, with a Translation of Auenbrugger," etc., was published in 1833 and gave a fresh impulse to the art of mediate auscultation. A greater work was undertaken in this direction, when in 1833, conjointly with Dr. Tweedie, and Dr. Conolly, he projected the "Cyclopædia of Practical Medicine," which was completed in four volumes, royal 8vo, in 1835. He contributed the articles "Abdomen, Exploration of," "Angina Pectoris," "Asthma," "Auscultation," "Bathing," "Chest, Exploration of," etc., together with a manual of "Select Medical Bibliography," which was also published as a separate work in 1835. This Cyclopædia included the labours of sixty-seven British Physicians of the first rank, and it was not without justice

that in the notice of the work in the first number of the *British and Foreign Medical Review* John Forbes thus characterised the completed undertaking:—"independently of its merits as a separate work, its publication must be regarded as marking an epoch in the Medical literary history of this country. No attempt had been previously made in Great Britain to unite the great body of practical men of eminence, in any one branch of the Profession, in a combined plan of embodying and giving to the world the actual state of our knowledge in that particular branch; and no individual had yet succeeded, though some had made the attempt, in producing such a work as might be fairly considered to represent the great and characteristic features of British Medicine in these later times." The article from which we quote is itself a valuable essay on the Bibliography of Medical Dictionaries and Cyclopædias.

Of all John Forbes' labours, the *British and Foreign Medical Review*, which he founded in 1836, and which he carried on successfully for a period of twelve years, has contributed most largely to advance the science and art of Medicine, and that wherever the English language is spoken. When he published the last number, being the forty-eighth, in October, 1847, he added an interesting postscript, in which he gave a few particulars respecting the history and fortunes of the journal. He made remarks on the then state of Medical criticism, as exhibited in the more popular journals, which are not without application at the present time. "In some of these," he observes, "not only was the general style of the writing of the coarsest and most slovenly character, but what was still more lamentable, the judgments and opinions passed on the books reviewed were not only crude and unsifted, but often most incorrect and unfair." He was the first to pay contributors to Medical journals, and he did this upon principle, to the end that he might secure good and honest criticisms. He enjoined the strictest impartiality on his contributors, and he was careful to avoid entrusting particular books to writers who, from various circumstances, might be presumed to be more or less biassed against, or in favour of, the authors. We might mention other points to which he called attention in his postscript, all marked by the same good taste, good common-sense, and high principle. The whole essay is one of the highest interest to all who value the dignity of the Profession and the advancement of Medical Science.

Nothing could be more conclusive as to the ruling motives of his nature, and as to his true nobility of soul, than the publication in 1849 of the Index to the twenty-four volumes of the Review. His experience of books must have convinced him that the sale would by no means remunerate the outlay; that, in short, he would incur a pecuniary loss. Such a consideration was, however, no obstacle to the attainment of his object, which was, to use his own words, to complete and to render as perfect as it was in his power to make it the work upon which he had been so long engaged. The Index itself, compiled by Dr. Robert Bower, is a model of a thing of the kind, and must be considered for many years to come as the most valuable book of reference the Physician can have in his library, for it is a history, in the briefest, of twelve years of Medical life and literature, distinguished beyond all others for the advances made in them. When John Forbes withdrew from the Editorship of the Review, those who had been associated with him in the work, or who admired his energy and honesty, presented to him his portrait, painted by Partridge, "as a lasting memorial of their approval and esteem." In return, he dedicated this Index to them, naming each. The list comprises the names of 264 members of the Profession, the greater proportion distinguished in Medical science and literature, and resident in the Universities, Medical Schools, and provinces both of the United Kingdom and the United States. No such high mark of esteem was ever before conferred or so signally merited.

The Review was, however, founded for other objects than to improve the taste and advance the intelligence of the Medical Profession. Polypharmacy, partly owing to the ignorance of the public, and partly of the Profession, and in some degree to the Apothecary-system of England, had attained an enormous development, detrimental alike to the Profession and to Medical art. John Forbes was a man of quick perceptions, and was a shrewd observer; as such, he might have made a most successful ordinary Practitioner. But his mind was much too logical to be satisfied with the *post hoc ergo propter hoc* conclusions so common in physic, upon which Polypharmacy is exclusively based, and too philosophical to be content with the minute but often not philosophical researches of the pathological anatomists. He was sceptical as to the alleged uses of drugs, because he knew well the fallacies upon which the doctrines as to their uses were founded, and sceptical as to the conclusions of the pathologists from a profound conviction of the narrow limits within which researches into vital structure and vital laws must necessarily be restricted. Hence he was led to place more reliance on an enlightened or scientific experience, than on the application of necessarily narrow and imperfect theories of the nature of diseases and the *modus operandi* of drugs. His "Observations on the Climate of Penzance and Land's End," published in 1820, were the first of his contributions of this class to Medical science. These were followed up by papers "On the Geology of the Land's End District and St. Michael's Mount," contributed to a Society of which he was among the earliest supporters, if not founders,—namely, the Royal Geological Society of Cornwall, and published in its *Transactions*, and by an essay, "On the Medical Topography of the Hundred of Penrith," communicated to Vols. I. and II. of the *Transactions* of the Provincial Medical and Surgical Association, of which Society he was from the first a leading and energetic member. It was, however, by founding the *British and Foreign Medical Review* that he created the best opportunity for promulgating enlightened and rational views as to the true scope and business of Medical Science and Art. His essay, published in vol. xxi. (1846), entitled "Homœopathy, Allopathy, and Young Physic," was undoubtedly unpopular with many of the Profession, because of its hearty denunciations of the system of pouring in drugs, and because he fearlessly (as was his wont) sought truth from any source, and, therefore, did not wholly despise the little that could be learned from the errors of Homœopathy. Much of the outcry raised at that time against him came, however, from disappointed authors and envious foes, who maliciously stimulated the "ignorant impatience" of the less advanced and less educated members of the Profession. John Forbes knew well beforehand what he would incur in pursuing this course of conduct in the Editorship of the Review. He "was early warned by many kind friends," as he acknowledges; but he took his stand on what was needed for the elevation of the Profession, not for the flattery of it, hoping that "the Review might itself cure the evil from which it was meanwhile to suffer." (a)

Faithful to his mission, John Forbes did not cease to advocate the doctrines developed in the Review after he had withdrawn from the Editorship. His "Nature and Art in the Cure of Disease," published in 1857, and of which a second edition was required, was avowedly written as a "Legacy" to his "Younger Brethren," and with that "feeling of solemnity which naturally accompanies any act that is to be the last of its kind." It is a fuller and more systematic exposition of his Medical doctrines and will certainly establish

(a) Postscript to 24th (last) vol. p. 593.

his claim to the title of the Modern Sydenham, for in it he gives systematic coherence to the doctrine of the Natural History of Diseases, upon which Sydenham's fame rests, but which he only indicated. If John Forbes had had a fair metropolitan field for the demonstration of his views as a Hospital Physician and Clinical instructor, they would have not been so long in making their way; but it cannot be doubted that the more rapid development they have recently attained is mainly due to his long labours. We must thank him that so many of the Profession now discern the need of a more enlightened method of treatment in regard to drugs and all "perturbative" agents. And it is a satisfaction to know that he lived long enough to witness this change in the principles of Medical Art, and contemplated its results in his retirement with feelings of unmingled satisfaction.

Sceptical by constitution, John Forbes, like many men of his character, was always ready to receive and examine any new thing which promised progress. Hence he gave a modified support to Phrenology; he cordially advocated abstinence from fermented liquor as a general rule, and would, perhaps, have done more in that respect if the fanatics of the sect had not repelled him, as they repel every man of any position or refinement. As with Homœopathy, so with Mesmerism; he gave all its phenomena a careful consideration, and dispassionately distinguished the true from the false. He personally and carefully investigated some of the cases of clairvoyance subjected to public criticism, and made the results known to the public in a series of letters published in the *Athenæum* and *Medical Gazette*. In November, 1845, these were published in a collected form, in 18mo, under the title of "Illustrations of Modern Mesmerism from Personal Investigation." It is a happy and humorous exposure of the tricks of some of (at that time) the most notorious of the Mesmeric quacks, viz., Alexis, Adolphe, Fraulein von Gönnern, Miss Martineau's maid, and George Goble, the barrister's clerk. His account of the detection of the latter trickster, which he performed admirably in conjunction with Dr. Sharpey, is an amusing episode in the history of mesmeric frauds and their detection.

The singleness of aim which guided John Forbes gave a consistency and a unity to all his actions. Hence the same motives which led him to found the *British and Foreign Medical Review* and the *Cyclopædia of Practical Medicine* stimulated his efforts to establish and advance the Sydenham Society, by means of which the Profession had placed within their reach, at small cost, excellent editions and translations of the leading Classical Authors of Medicine, both ancient and modern. He also took a warm interest from the first in the success of the Provincial Medical and Surgical Association. All questions of Medical Reform and Medical Policy had his earnest attention; and when in 1845 he accepted the Fellowship of the Royal College of Physicians of London, it was mainly with the hope that by entering the *penetralia* of the College he would have the opportunity of advocating, if not of introducing, more liberal measures. John Forbes took the matter of Medical Reform about this time into his own hands, and had a draft Bill privately printed.

No great Physician ever limited his labours to mere professional studies, and John Forbes proved no exception to the law. Hence he diverged into the fields of general science. He loved science, and encouraged it because he loved it; and he was a most constant attendant at the meetings of the Royal Society and Royal Institution, on the Council and Committee of which respectively he frequently served. Nor did he neglect the walks of general literature. He was a pleasant and easy writer, as is proved by his "Physician's Holiday; or, a Month's Tour in Switzerland," published in 1849, and which was re-published in a cheap form. It is highly characteristic of the mind of the writer, and pervaded by so genial and so healthy a tone that the most stolid could not fail to be instructed and charmed by its perusal. A similar spirit pervades a little Essay, written in 1850, entitled, "Of Happiness in its Relations to Work and Knowledge," in which he returned to the theme that occupied him as a student in Edinburgh in 1817. It was published at the request of the members of the Chichester Literary Institute, to whom it was delivered at the opening of their session. He also published two other books of travel, viz., "Memorandums made in Ireland in the Autumn, 1852;" and "Sight-seeing in Germany and the Tyrol in 1856."

It is, perhaps, not generally known that John Forbes had also his communings with the Muses. He might have been a poet if he had not been a great Medical Reformer. We have in our possession, as an exchange piece of poetry, verses which serve to prove he had poetic power that required only cultivation to have ranked him with Darwin or Akenside.

It was not to be expected that a man occupying so influential and authoritative a position as John Forbes occupied could pass through life without exciting animosities in numerous and diverse quarters. Hence he had his quarrels. These need not be discussed or even named here; but it may be affirmed, without fear of contradiction, that those who knew him the best knew him to be, in every sense of the phrase, a scholar and a gentleman. No man was ever a truer friend; no man more strongly prejudiced in favour of his friends; but this is ever the infirmity of a generous nature, and such a man can never be mean or ungenerous to an enemy. His main defect was a defect of temper, or, rather, of temperament; and of this no one was better aware than himself. He felt that he was too quick in receiving impressions, and too rash in acting prematurely on them. Seated calmly at his desk he was full to overflowing of liberality and cautious thinking,—of doubts and hesitations. Placed, however, on a different stage,—say at a public meeting,—where matters for decision and action were agitated, his temper was roused if obtuseness, or stupidity, or cowardice, or, most of all, unfairness or dishonesty was manifested; and out he came with words and conclusions which his calmer reflection told him should have been withheld, and which often became the subject of future regret. This infirmity occasionally hurried him away (as we know), even when he was deliberately and fully on his guard. In short, he "wore his heart on his sleeve for daws to peck at." The defect was, in truth, the overflowing of that generous, manly nature which characterised and governed all his actions.

In private life, John Forbes was a man to be both loved and honoured. Professing too little perhaps of the Christian faith, there was no brighter example of all Christian virtues. He bore no malice; and he had so little of it in his nature that he had difficulty in understanding how men could be such fools as to entertain it. "Do as you would be done by," was the daily rule of his life, and was manifested in acts of overflowing benevolence. No poor governess struggling with penury, or young artist launched with insufficient capital or patronage, on the great sea of London life, ever applied to him in vain. He sympathised with the young Practitioner in his early struggles, and he had no greater happiness than in holding out a helping hand to any professional brother who appealed to him for aid in pecuniary difficulties. In every Medical Benevolent Institution he took an active interest; and his sympathies extended even far beyond professional circles. Amongst the many benevolent and charitable institutions he thus laboriously fostered, during his residence in London, may be mentioned the Hospital for Consumption at Brompton, the Governesses' Benevolent Institution, the Asylum for Idiots, the Medical Benevolent Fund and College; the Convalescent Hospital, etc. In a rigid estimate of his character, this excessive benevolence must be considered a

defect, for it sometimes ran wild; but with his defects we have nothing to do; at any rate it was one he shared with other distinguished Physicians.

John Forbes received a fair share of those honours and honourable titles which often indicate rather the opinions of the donors than the merits of the recipient. He was a Knight; Hon. D.C.L. of Oxford; a Fellow of the Royal Society and of the College of Physicians, London; Hon. Member of the Cambridge Philosophical Society; of the Academy of Sciences at Madrid; of the Royal Society of Göttingen; of the Royal Medical Society of Copenhagen; of the Imperial Society of Physicians of Vienna; of the Medico-Chirurgical Societies of Turin and Amsterdam; of the American Philosophical Society, etc. He held the appointments of Physician in Ordinary to her Majesty's Household; and to the late Duke of Cambridge; Physician Extraordinary to the Prince Consort; Consulting Physician to the Hospital for Consumption.

For the last three years the state of his health compelled Sir John Forbes to retire altogether from practice. He began to have attacks of vertigo, in which he sometimes fell suddenly to the ground, and also experienced states of imperfect consciousness of objects and places, and had a tendency to turn to the right side. These symptoms of structural disease at the base of the brain were the commencement of the illness which finally terminated in complete paraplegia for three months before his death. He was assiduously attended throughout his last illness by Mr. Blyth, of Whitchurch, and was also frequently seen by Sir James Clark, Mr. Spencer Wells, and other of his old Medical friends. He died last Wednesday evening soon after seven o'clock.

THE WEEK.

How many generations will be allowed to pass ere a knowledge of the existence and properties of carbonic acid gas forms a part of the common information of the people? One morning last week two men were found dead in their berths in a small vessel in the Bute Docks, Cardiff. Five of them had gone to bed the night before, bringing a pot-full of burning coals into the forecastle, to "make themselves comfortable." About the same time, the inmates of Studley Castle were exposed to equal risk. The servants had commenced heating the various apartments by the hot-air flues provided for that purpose. From negligence in removing and not replacing the covers of the apertures, a large quantity of carbonic acid gas was emitted to the several rooms. The first to feel the perilous effects was a lady visiting at the castle. Finding that she was rapidly becoming insensible, Sir Francis Goodricke instantly set out for Mr. Morris, Surgeon, who came at once, and on his arrival found that Lady Goodricke was also apparently dying. Mr. Morris soon divined the cause, and took his remedies accordingly; but while he was attending to Lady Goodricke and the lady first seized, Sir Francis himself and Miss Goodricke also fainted. Every attention possible was given to the sufferers, but they remained unconscious for hours. Happily, says the *Birmingham Post*, they were all ultimately restored, and are now convalescent.

The Winter Session of the School of Medicine in Cecilia-street, Dublin, in connexion with the Catholic University of Ireland, was opened on Monday, November 4, with an address by Dr. J. A. Byrne, Professor of Midwifery, and Dean of the Faculty of Medicine. The Lecturer paid a tribute of respect to his numerous compatriots who have rendered the Dublin School of Medicine illustrious. Amidst the civil war and oppression which ravaged Ireland for many centuries, Medicine was of late introduction in a corporate form. The Royal College of Physicians received its charter from Charles the Second in 1667, and the Royal College of Surgeons not till 1784. By means of the practical advantages of the Irish School, every branch of Medicine, and of those collateral studies which raise it from an empirical art to a science can be cultivated to the greatest perfection. The Lecturer gave an eloquent account of the intellectual benefits derivable from the study of physiology and chemistry. Passing to the position and prospects of the students, he remarked that, within the last five years, the number of Medical students in Dublin is almost doubled, there being now 806, whereas in 1856 the number was but 487. He next spoke with approbation of the system of competitive examination:—

"Within the past few years a great and most beneficial change has been made in the mode of appointments to the different public Services. Formerly these appointments were in the hands of a few men, who had the patronage and distribution of the most coveted prizes in those services; formerly, to obtain an appointment it was necessary to be a parasite of some great man—some noble personage, a member of the Cabinet, or M.P., formerly, to wear the scarlet coat, or the blue uniform of the Navy, or that of the East India Company, the only chance was to prostrate yourself before some one having patronage, and bring all the influence which you could to bear upon him, in order to induce him to recommend you to the heads of those departments of the services, and then, gentlemen, need I tell you the result? Under those circumstances, 'Sawney' generally had the advantages on his side, and poor 'Paddy' was distanced in the race. Thus, we find that comparatively few Irish Surgeons were to be found in the Army or the Navy. Sawney stuck to Sawney, and gave him everything he had in his power to give, and we must not blame him for this; it was, at all events, a manifest proof of that strong tie of nationality for which the inhabitants of that portion of her Majesty's dominions, to use an official phrase, and one very often applied to our own country, have always been distinguished; but now, gentlemen, the case is altered—those prizes are not in the hands of individuals, they are the reward of merit; the competitive system has thrown up the gates of monopoly to all, Irish, English, Scotch; but no, not to the dark-skinned Hindoo—the gentle blood of England could not brook association with the victims of her oppression. But what has been the result of this breaking down of the barriers of private patronage? That since the introduction of this system very many of the prizes in the Royal Services have been won by Irishmen; they have taken the first places, they have received the first marks, and the Services have been benefitted by acquiring a better educated class of men; and the equality of Irishmen, to use the most modest term, has been fully established."

The lecture terminated with some practical remarks on the Act of "registration," and on the value of hard work in acquiring both general and professional education. The number of students in the Medical Department of the Catholic University appears to be steadily increasing; it was 36, now it is 101. We can cordially wish success to every competitor in the task of rearing a body of humane, conscientious, and skilful Practitioners. Amongst London Practitioners the Irish stand distinguished for the popularity which they win by their tact, urbanity, and practical good sense; and whatever the unfortunate politico-religious difficulties in their native country, they are happily unknown here.

There is a somewhat acrimonious dispute going on in the Stafford papers about the practice of allowing lunatics to walk in the public roads. Doubtless it is an act of inhumanity to confine these poor creatures to their tiresome grounds, and to deny them variety of scene, if they are capable of enjoying the privilege of a walk without injury to other people. The attendants who accompany them should be responsible for their good behaviour and sufficiently numerous to enforce it. It would be a better plan if they could ramble about in fields

*

out of the public roads. We thoroughly endorse the following passage from a letter of Mr. Banks Farrand in the *Staffordshire Advertiser*:—

"Too much praise cannot be given to the occupier of the Beacon farm for the generous manner in which he allows his land to be perambulated, and to some extent to be trespassed upon, by the patients of both asylums. In order to promote their happiness he suffers some inconvenience, and occasionally puts himself out of the way to serve them. He will not lose his reward."

It must be recollected that any eccentric conduct or language on the part of the insane has a decidedly unwholesome influence on the minds of children who witness them.

The death of the King of Portugal from typhus, the illness of two of his brothers from the same cause, and the death of the late Queen from putrid sore-throat, and of Donna Maria, the late King's predecessor, from the same cause, seem to point to some palpable insanitary conditions in the Portuguese Palaces. We wish that the new King would invite over a deputation from the London Medical Officers of Health, to inspect and report.

Day after day the newspapers give us instances of crimes committed by soldiers, the causes of which are deep below the surface, and show something rotten somewhere. To-day it is a drummer at Colchester, who, desirous of getting his discharge from his regiment, adopts an expedient which is effectual enough, no doubt, though rather expensive,—he sets a farm-yard on fire, runs the risk of destroying thousands of pounds' worth of property, and then gives himself up, and tells the policeman his motive. Yesterday it was a private soldier, who attempted to murder his sergeant because he had been hindered from taking part in some amateur theatricals! About a month ago there was the cruel murder of a student at Chichester. Not a month before, there was the murder of Colonel Crofton and Captain Hanham, at Preston; and if we search the files of the daily papers, we shall find a continuous series of the deepest crimes against life, committed on grounds to all appearance the most trivial. It is curious to notice how thoroughly superficial are the remedies propounded by the newspapers: "Take away the rifles and ammunition!" cries one; "Call a drum-head court-martial, and hang the murderer red-handed!" says another; and there can be no objection to either process, supposing it to be regarded as a temporary or palliative measure. But we require to look deeper, in order to apply a radical remedy. Soldiers display not merely a reckless disregard of other persons' lives, but of their own. Suicide is almost a military institution. There were twenty cases of it in the army in the United Kingdom in 1859, besides that many of the men "found drowned," may, as Dr. T. Graham Balfour says, have destroyed themselves. Such utter recklessness of life, as is shown by the wanton murder and the suicide of soldiers, demands more than mere punishment. It shows that the conditions of that life render it worthless to its possessor. The result of our own inquiry among military men tends to lay the blame on tedium, monotony, and want of healthful occupation, and the utter absence of all encouragement from the Horse-Guards for studies and employments which shall make soldiers better men; added to the impossibility of leaving the service, and the difficulties of matrimony. But when we took an opportunity of inquiring from the clerk to a bench of magistrates near a barracks, he laid the blame on a want of sympathy and community of feeling between officers and men, and a system of petty, schoolboy vexations, and irritating punishments inflicted on the men. He told us that when remonstrating with a tall soldier, whose breast was covered with medals, for some offence which had got him into trouble, he received for answer, "By G—, I must do something; if I didn't do this, I should shoot myself, or one of *them!*" Recklessness of life among soldiers is a deep-seated disease, and demands a patient, tender, but most searching examination—one that should be conducted by persons who are not soldiers. The Woolwich cadet riots are part of the same system: an utter ignoring of the mental and physical requirements of human beings.

A case was tried on Tuesday at Guildhall, before Mr. Baron Martin, in which a Mr. Hurly claimed compensation from Mr. Drew, a chemist, for injuries alleged to have been received through the careless preparation of medicine. In June last, it is said, the plaintiff, who was suffering from diarrhœa, sent to the defendant for some medicine. He received something which made him insensible, disordered his health, and compelled him to go to the sea for change of air. The medicine when analysed was found to be composed of chloroform, oil of cloves, and peppermint (query, *chlorodyne?*), and it was confessed by the chemist that it had been prepared for some time, and that the chloroform had fallen to the bottom of the bottle, and that the plaintiff had received an overdose of it. Ten pounds had been paid into Court, and the Jury awarded £22, which was the whole sum claimed.

We have, through an oversight, omitted to notice the case of Dr. Robert Beith, a Surgeon of only nine years' standing, who, according to a statement made in the *Daily News*, "has of late, and with an unwonted degree of rapidity, filled in succession the situations of the temporary charge of Bermuda Hospital, of Surgeon to a coast-guard ship, of Surgeon to a marine detachment at Deal, and within the last few months of Surgeon and Medical storekeeper at Plymouth Hospital, has just been promoted to the rank of Deputy Inspector-General, and appointed as such to that institution. Now, against Dr. Beith's promotion we have nothing to say. He is, we believe, an officer of much, perhaps of rare, ability and merit; but there is no reason to suppose that he possesses those qualities in a degree superior to others who have seen much more, and more distinguished service, and are a long way his seniors, in the service, as well as on the list of Deputy Inspectors." Amongst the officers to whom an apparent act of injustice has been committed by the elevation of Dr. Beith, are Drs. Armstrong, Smart, and Mackay. Besides other services, Dr. Armstrong was Surgeon and Naturalist in the Xanthian expedition. He was Surgeon of the *Investigator* when that ship achieved the north-west passage under Sir Robert M'Clure, and was Surgeon of a line-of-battle ship in the Baltic during the Russian war. He is the author of a "Personal Narrative of the Discovery of the North-West Passage," and of "Observations on Naval Hygiene and Scurvy." He has also received the gold medal founded by Sir Gilbert Blane, and awarded biennially, for the best Medical journal in the service. Dr. Armstrong, moreover, had the honour of accompanying the Prince of Wales, in the capacity of private Physician, when his Royal Highness was on a continental tour. Dr. Wm. Smart, at present chief Medical officer of the Royal Naval Hospital, Bermuda, was Surgeon of the *Diamond* Hospital ship, and also of the Hospital on shore at Balaclava, during the whole of the operations in the Crimea, where he had charge of the sick and wounded of the Naval Brigade serving in the trenches before Sebastopol. He served afterwards for upwards of two years in charge of the Hospital ship at Hong Kong during the war in China; and for this he was deservedly promoted. Dr. Smart is the author of several valuable papers—"On the Diseases of the

Crimean Campaign," "The Topography of the Crimea," "The Climate and Diseases of Hong Kong," etc. He is also a recipient of the Blane medal, and is a Knight of the Legion of Honour. Dr. George Mackay was made a Surgeon nearly twenty years ago; he was Surgeon of Lord Lyons' flagship in the Black Sea during the Russian war, and for several years was Surgeon and Medical storekeeper at Plymouth; he h also obtained the Blane medal.

The sad death of Mrs. Ernest Hart, on Thursday week, has given rise to much comment, and many incorrect rumours have been circulated. The facts we believe to be strictly as follows:—Late on Wednesday night, Mrs. Hart took a drachm of tincture of aconite which had been ordered in a two-ounce mixture for a child, staying in the house, who was suffering from whooping cough. The mixture was taken in mistake for a black draught. At three in the morning Mr. Hart was disturbed by his wife vomiting, but this was attributed to the black draught, and no fears were excited. It was not until after breakfast on Thursday morning that the mistake was discovered. By that time all cause for alarm seemed to have subsided. Dr. Richardson saw the lady at eleven in the forenoon, and thought her quite out of danger. It seems that some vomiting had excited Mr. Hart's apprehension, and a question was raised as to the propriety of checking this symptom. Dr. Richardson thought it was not advisable to interfere. He was called again at one o'clock, and found the lady dead. It then appeared that two or three doses of hydrocyanic acid had been given in order to check the vomiting. The verdict at the inquest was "Accidental Death." The Medico-legal questions as to the action of aconite and hydrocyanic acid raised by this painful case are of great importance.

REVIEWS.

Guy's Hospital Reports. Third Series. Vol. VII. Pp. 392. London: 1861.

It is almost superfluous to say that the volume of Guy's Hospital Reports before us maintains the high reputation which these periodical issues have so long enjoyed. Amongst other interesting and valuable papers we find three from the pen of Dr. Pavy, on certain questions connected with diabetes, and one by Dr. Gull, on "Paralysis of the Lower Extremities, Consequent upon Disease of the Bladder and Kidneys (Urinary Paraplegia)." Upon the last mentioned paper we propose to make a few remarks, not because it is in itself the most interesting and important in the volume, but because Dr. Gull is one of the combatants in a duel touching the pathology of loss of voluntary motor power, which has, in certain instances, been observed to follow disease of the urinary organs. In a former review (*Medical Times and Gazette*, No. 570, p. 582) we pointed out that the doctrine of "reflex paralysis," as it has been termed, did not depend for its acceptance upon the establishment of this single point, but that, although it was at present the question mainly in dispute, other more simple and more easily established examples of reflex paralysis were not wanting. To this theory, strenuously maintained by Dr. Brown-Séquard, we mentioned that an opponent had risen up in Dr. Gull, whom we regarded to have undergone considerable discomfiture in the contest. But Dr. Gull is not one to give in at the first overthrow. In the volume before us he vigorously returns to the charge, and the dispute promises to be so ably carried on, that we regard it as our duty, by proclaiming the advantage gained or the ground lost by either, to encourage both to fight it out.

The exact point at issue between these distinguished Physicians may briefly be thus stated:—Dr. Brown-Séquard holds that the paralysis which follows not unfrequently upon affections of the urethra, bladder, prostate, or kidneys, not being associated with perceptible changes in the structural condition of the spinal cord, results from *a reflex operation* exerted through its mediation, the nature of which reflex operation we endeavoured to set forth in the review referred to. Dr. Gull, on the other hand, maintains that such cases of paralysis are the result of *myelitis*. In the course of his argument Dr. Brown-Séquard quoted with triumph a case recorded by Dr. Gull in the fourth volume of "Guy's Hospital Reports," as actually supporting his view of the reflex character of the paralysis, and Dr. Gull, naturally enough, objects to be shot with an arrow winged with one of his own feathers. As impartial observers of the contest, therefore, only anxious that the right shall be established, we propose to lay before our readers now the leading points of Dr. Gull's essay.

Dr. Gull commences by pointing out *two sources of error*, which it is implied Dr. Brown-Séquard and others who hold his views have not avoided. *The first* is that the true order of morbid processes is not always that which they superficially present to our notice; and he refers in illustration of this (which we suppose no one will be disposed to question) to the history of cerebral disease which may "for months or years lie latent and bewilder us with peripheral symptoms, and particularly with every variety of gastric disturbance." On this basis Dr. Gull first makes his attack on Dr. Brown-Séquard. The latter in a table of diagnosis which we have formerly quoted adduces as one of the marks of urinary reflex paraplegia that it is "preceded by an affection of the bladder, the kidneys, or the prostate, while in paraplegia from myelitis there is no disease of the urinary organs except as a consequence of the paralysis." "Taken thus generally," Dr. Gull writes, "nothing is more untenable than this statement. . . . Disease of the bladder, prostate, or kidneys may be the cause of paraplegia; but it is equally true that affections of the bladder, kidneys, or prostate may be the prelude of a paraplegia from myelitis." He adduces no proof, however, but in place of it quotes a case of "cerebro-spinal exhaustion from overwork," where catarrh of the bladder preceded for two years the weakness of the lower extremities, and another, which we suppose his adversary would at once concede as centric in its origin, where severe dyspepsia preceded a fatal paralysis and after death the substance of the cord in the dorsal region was softened almost to diffluence.

In the second place, Dr. Gull accuses writers on urinary paraplegia of *magnifying cases of mere muscular weakness* into the full proportions of cases of paralysis. This is the second error he believes they have fallen into. He says he cannot conclude in many of these cases that there was any paraplegia at all. This is a blow at the very root of the theory. It involves the old difficulty arising from the use of words. What is paralysis? Do Dr. Gull and Dr. Brown-Séquard agree in the sense in which they accept the term? In illustration of his notion upon this subject Dr. Gull instances a case which he heads "Universal muscular atrophy to an extreme extent; pseudo-paraplegia; anæmia." His comment on it runs thus:—"Although the first aspect of the case gave the impression that it was one of paralysis from disease of the cord, there was in reality no paralysis at all. The dropped and extended feet and partially dropped wrists, and the thumb gently inclined to the palm, were owing to the muscles being too weak in their nutrition to counteract the mere force of gravitation." And he adds:—"The case was strictly one of debility, and not of paralysis, if we may distinguish cases of diminution of voluntary power from simple insufficiency of muscular nutrition, from those of actual lesion of the nervous or muscular apparatus." Are we to understand, then, that Dr. Gull's test of paralysis is the co-existence of "actual lesion of the nervous or muscular apparatus"? If so, Dr. Gull plainly begs the question at issue; if not, his argument is worthless. Paralysis undoubtedly has its degrees, the lowest being muscular weakness, the highest absolute total loss of power. Mr. Spencer Wells, in describing urinary paralysis, says "the weakness of the limbs is rather extreme debility than complete paralysis;" and Dr. Brown-Séquard admits that the paralysis is "usually incomplete."

In his lectures on this subject Dr. Brown-Séquard lays stress upon the argument derived from experiment, asserting that he had seen the vessels of the pia mater of the cord contract on a ligature being applied on the hilus of the kidney compressing the renal nerves and (confirming the results of Comhaire) that he had observed paralysis of the correspond-

ing lower limb to follow extirpation of a kidney or of one supra-renal capsule. Here Dr. Gull joins issue with him on the matter of fact; asserting, on the contrary, that in the same animals as were used by Dr. Brown-Séquard he has performed the same operations and has not observed the same results. He explains the discrepancy by stating that paralysis "does not follow if care be taken not to injure the lumbar or psoas muscles in exposing the kidney and putting a ligature upon it." This discrepancy of fact, however, is one which (if of the importance it is supposed to be) can without difficulty be set right by new and careful experiment.

It may be well to give this part of the paper in Dr. Gull's own words:—

"On laying bare the spinal cord and membranes in dogs and rabbits (the animals selected by Dr. Brown-Séquard), no other vessels are visible in the dorsal and lumbar regions than small veins, namely, the dorsal vein and its tributaries. The columns of the cord are seen white and glistening through the membranes. There is not any structure which in itself deserves the name of pia mater, such as exists over the convolutions of the brain. Nor are the columns of the cord much more vascular than tendons. There are no visible vessels on them, nor in the membranes, except those which have been mentioned. It was, therefore, a matter of surprise that these vessels should have been seen to contract; and on placing a ligature on the vessels of the kidney, and irritating the renal nerves, certainly no visible effect was produced—the vessels under observation underwent no change. If our surprise was great at the distinctness with which it had been stated that the vessels of the membranes generally had been seen to contract when the renal nerves were irritated, it was greater still at the further remark, 'that the contraction was more evident on the side of the cord corresponding with the side of the irritated nerves;' for such vessels (venules) as are visible in the membranes of the cord are so distributed as render it apparently impossible that those of one side only should be made to contract. They ramify without any limitation to one side of the cord or the other."

Dr. Gull further objects to the reflex hypothesis on the ground that urinary paraplegia does not occur in children, and very rarely in women, although both possess a more impressionable nervous system than adult males, and are both liable to calculus and other sources of urinary irritation, and that it is a sequence rather of chronic disease and of inflammations, than of recent disease, where the mucous membrane is more impressionable, and of irritations.

"Our conclusion," writes Dr. Gull, "from all these facts is, that urinary paraplegia arises from an altered condition of the spinal cord, due to extension of the disease through continuous structures to the cord itself. To this it has been objected that we ought to find traces of myelitis after death." In another place he writes:—"No case of urinary paraplegia has been fully examined without finding such degeneration." And he disposes of his own case, quoted by Brown-Séquard, by asserting "that it was not one of urinary paraplegia, but one of asthenia;" and by pointing out, by reference to Brown-Séquard's table, that it differed from his description of the disease in several important particulars.

Here, then, at present, the matter rests. Dr. Gull's assertion that no case of urinary paraplegia (that is, no case bearing the diagnostic marks which Dr. Brown-Séquard or Mr. Spencer Wells lay down respectively in their tables) has yet been fully examined microscopically by a competent observer without finding morbid changes in the tissue of the spinal cord, is equivalent to a challenge to the supporters of the reflex theory, which we hope they will not be slow to take up.

The Alps; or, Sketches of Life and Nature in the Mountains. By H. Berlepsch. Translated by the Rev. L. Stephen, M.A. 8vo. Pp. 406. London: 1861.

Seventeen excellent plates illustrate twice that number of chapters, extremely well translated by Mr. Stephen. A few of the titles of these chapters will suffice to make known the nature of this work,—which we can warmly recommend to those of our readers who may intend to visit the Alps, either by rail or river, or seated in an arm chair by the fireside,—"The Fabric of the Alps," "Granite," "Erratic Blocks," "Thunderstorms," "Mountain Snowstorms," "The Avalanche and the Glacier," "Life in the Mountains."

Forest Creatures. By Charles Bower. 8vo. Pp. 245. London: 1861.

The forest creatures, and the most interesting of their peculiarities and instincts, sketched in this book are the Wild Boar, the Roe, the Red and Fallow Deer, the Cock of the Wood, the Black Cock, and the Golden Eagle. It will interest such of our readers as "keep a corner" for the innate passion of the Englishman for sport.

NEW EDITIONS.

Elements of Experimental and Natural Philosophy. By Jabez Hogg, F.L.S., etc. Second Edition. 8vo. Pp. 560. London: 1861.

The author, in the full title of his work, presents these "Elements" as "A Familiar and Easy Introduction to the Study of the Physical Seiences, embracing Animal Mechanics, Pneumatics, Hydrostatics, Hydraulics, Acoustics, Optics, Caloric, Electricity, Voltaism, and Magnetism." It is illustrated by nearly 400 woodcuts. Ten thousand copies of the first edition having been sold, the author may justly say that it is "well known," and consider that it has received "sufficient evidence of public approval." It now forms one of the volumes of Bohn's Scientific Library, and will certainly be received as one of the most useful and aeceptable volumes of that valuable series.

A Practical Treatise on Inflammation of the Uterus, its Cervix, and Appendages: and on its Connexion with other Uterine Diseases. By J. H. Bennet, M.D. Fourth Edition. 8vo. Pp. 600. London: 1861.

There can be no doubt whatever as to the great influence which the former editions of this work have had upon English practice; and the Profession generally are now beginning to acknowledge, however great may have been the excesses and abuses to which it occasionally gave rise, that the influence has, on the whole, been for good; and that a large class of diseases, formerly unrecognized and unrelieved, are now well known and easily cured. For this we are indebted in a very great degree to Dr. Bennet—to his writings and to his example. The present edition of this work has been very carefully revised. The Author says, "During the two past years this revision of former labours has been my principal occupation, and in its present state the work may be considered to embody the matured experience of the many years I have devoted to the study of uterine disease." We sincerely trust that improving health may enable the author to complete the "Treatise on Uterine Pathology," which he had commenced when his professional career was checked, at the height of prosperity, by the severe illness which we may hope will be succeeded by a long period of usefulness.

The Diseases of the Prostate, their Pathology and Treatment. By Henry Thompson, F.R.C.S. 8vo. Pp. 364. London: 1861.

This work, as the title-page informs us, comprises the second edition of "The Enlarged Prostate," and a "Dissertation on the Healthy and Morbid Anatomy of the Prostate Gland," to which the Jacksonian Prize for the year 1860 was awarded by the College of Surgeons. It is, therefore, a second edition of "The Enlarged Prostate," with additions, a more comprehensive title, and with several new plates, making it almost a new work. We are glad to see that the Author has abandoned the proposal recommended in his first edition, to treat hypertrophied prostate by compression. He says, "After some experience of the employment of compression in its simplest and most innocuous form, viz., by expanding an india-rubber tube with water, so as to exert a considerable influence on the neck of the bladder, I am of opinion that the risk encountered of irritating the parts, does not compensate for any little benefit obtained, and which is mostly only temporary in its character."

On Surgical Diseases of Women. By I. Baker Brown, F.R.C.S. Second Edition. 8vo. Pp. 410. London: 1861.

This work, like the two others we have just briefly noticed, proceeds from a gentleman who has distinguished himself by special attention to one branch of his Profession. The great opportunities which specialists enjoy in a large city, may be

estimated from the fact that in the present edition of this work Mr. Brown gives us detailed histories of forty-two cases of vaginal fistula, of eighty-one cases of ruptured perineum, of fifty-five operations for the cure of cystocele, rectocele, and prolapsus uteri. He gives us chapters on Fibrous Tumours of the Uterus, and on Hypertrophy and Irritation of the Clitoris, which may probably receive a more lengthened notice hereafter. In the meantime we may say that, with some evident blemishes, Mr. Brown has given the Profession a very useful record of clinical observation in the treatment of some of the most distressing diseases to which women are liable.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

LESION OF THE FOURTH VENTRICLE IN DIABETES.

The relation of diabetes to lesions of the fourth ventricle is a question of some clinical importance. Many observations are now on record of glucosuria having followed blows or falls on the head or nape, but few of these have, by means of autopsies, given any pathological confirmation of Claude Bernard's experimental conclusion as to the co-existence of material lesion of this ventricle and diabetes. In those cases in which the nervous centres have been found to have undergone changes, these have for the most part been observed in other parts than the floor of the fourth ventricle, as the pedunculi, the cerebellum, the optic thalami, etc. M. Martineau has recently brought an interesting case bearing upon this subject before the Paris Anatomical Society. The subject of the case having been exposed to great heat in August, 1859, was seized with intense thirst, which never became afterwards appeased, and was, indeed, the first indication of diabetes which soon exhibited its other habitual symptoms. From the commencement the man complained of tingling, and marked weakness of the whole left side of the body—symptoms which disappeared at the end of three months. He went from Hospital to Hospital until he died, at the end of about two years from the commencement of the attack, advanced tuberculization of the lungs and atrophy of the papillæ of the retina being among the numerous lesions discovered after death. The most interesting of these in the present point of view was that affecting the fourth ventricle. The floor of this, especially near the *calamus*, was of a marked grey colour, produced by its abundant injection, the vessels coursing along the surface of the ventricle being also larger and more apparent than in the normal state. M. Luys, who was present at the autopsy, recognized in this a change which he has already described as occurring in diabetes, it being, in fact, the first stage of an alteration which goes on to ulceration of the cerebral substance.—*Gazette Hebdomadaire*, No. 45.

ON PREPARING FOR TURNING IN DRY LABOURS.

By Dr. LANGER.

Dr. Langer, of Davenport, Iowa, speaks in the highest terms of the following plan which he adopts for facilitating turning, when this is required in "dry" labour:—"Previous to turning, I place the patient on her back, side, or on her elbows and knees, as the case suggests, the better to enable me to introduce into the os tincæ two or three fingers to reach the child. With these I endeavour to carry between the head and shoulder, if it is a shoulder presentation (or near any convenient part according to the malposition), a large elastic catheter, whose orifice and pointed end are filled to the length of one inch, with clean lard, which has been kept at a low temperature, the mouth-piece of the catheter being attached to an elastic tube connected with a stopcock and an elastic Davidson or other forcing pump. Before connecting the catheter with the pump, I fill the catheter with sweet oil, at blood temperature, and lock the cock to keep the air out. I now endeavour to introduce the catheter as high up as practicable into the cavity of the uterus; better, if possible, between the ovum and inner walls of the uterus, but always opposite to the attachment of the placenta. Having reached with the point of the catheter the required height, I connect the catheter with the pump, filled with tepid oil, the free end of the pump being immersed in a vessel containing oil kept at the same temperature. I inject with a small degree of force, in the interval of pains, from a pint to a quart or more of oil, directing the patient between the injections to change her position from back to side, or elbow and knees, and, *vice-versa*, even to sitting or walking. On one occasion when I could not get oil I used the white of egg. From this simple operation I have noticed the most pleasant results, namely, I have seen patients who had been for twenty-four hours and more in intense suffering, in a comparatively short time calming down, with contractions of the uterus less annoying, the uterus, too, becoming more pliable to the hand for the operation of turning. No great difficulty was then experienced, and the employment of force was not required. Nay, I have succeeded even, after such preparation, in changing a malposition into a normal one, by the combined method of internal and external manipulation, without introducing the hand into the cavity of the uterus. The patients so treated have had less symptoms of nervous shock, and have exhibited far less the consequences of the dreaded operation, and consequently their recovery has been more speedy."—*American Medical Times*, No. 14.

EXCERPTA MINORA.

Salivation as a Precursor of Dentition.—Dr. Jacobi observes that great importance is attached by the public to salivation as a premonitory symptom of dentition; but it is a fact that this will sometimes precede the breaking through of a tooth for months, and will not cease after the tooth or a group of teeth have made their appearance. It is thought to be caused by the direct irritation of the gums acting on the mucous membrane of the mouth, the Stenonian ducts, and the salivary glands. The truth is, that increased salivation is regularly observed in infantile age long before and during the first period of dentition; and the increased secretion does not depend upon the protruding teeth, but is the result of the salivary glands and mucous follicles undergoing about this time a rapid process of development. . . . . You will not be deceived by the occasional emphatic statement, that dentition in normal and robust children will be attended with copious salivation, while sickly and feeble children have no salivation to any amount. This appears to be true, but is not so. The observation is imperfect in this, that healthy and robust children of four, six, or eight months, will generally, while awake, be in an upright position, thus dropping a large amount of the secretion, and being constantly wet with it, while sickly and delicate children of the same ages will be usually somewhat backward in their general development, while they will have too little muscular power to allow them any but the supine posture, most of the secretion being thus swallowed.—*American Medical Times*, Vol. iii. No. 7.

Arrest of Secretion of Milk.—Dr. Harriss, of Savannah, employs a saturated solution of camphor in glycerine in preference to belladonna. It is gently applied over the surface by means of flannel, several times a-day. The same solution, with the addition of four grains of tannin to the ounce is of utility in sore nipples.—*Ibid*, No. 15.

Wounds from the Enfield Rifles.—A Surgeon, writing from the seat of war in Virginia, observes that he has always found wounds from the bullets of the Enfield rifle very serious, although they may appear slight at first. They produce a hideous destruction of tissue, tearing bones and all else to pieces, giving rise to severe shock and extensive sloughing, with great danger of secondary hæmorrhage. The wound resembles that produced by crushing machinery more than anything else without doing so exactly. The part is livid, both openings being ragged, that of exit generally presenting everted edges, with masses and shreds of various tissues protruding. "I have never seen a recovery from one of these Enfield rifle wounds involving a large bone, where amputation was not performed early—*i. e.*, was not a primary amputation. The bone is uniformly comminuted, and the fragments are very sharp, so that the patient will die almost to a certainty from irritation and the discharge, if he do not do so from gangrene, which is not uncommon, even if the large vessels escape injury."—*American Medical Times*, No. 15.

Statistics of Operations for Cataract.—M. Rivaud-Landrau has published in the *Gazette Méd. de Lyon* for October a statistical account of 2317 operations for cataract performed by him between the years 1840 and 1860. These operations consisted of 2073 extractions, 177 depressions, and divisions, or breaking-up, 67. 1. *Extraction:* Of the 2073 operations, 1764 were attended with complete success, 108 with partial success, and 201 were unsuccessful. 2. *Depression:* 102 completely successful, 25 incompletely so, and 50 unsuccessful—177 cases. 3. *Division:* 55 cases of complete success, 8 incomplete, and 4 unsuccessful—67 cases. Consecutive operations reduced the number of unsuccessful cases to 189 by extraction and 46 by depression. Taking into account only the successful cases, we find that the operation by extraction furnished 82 per cent., that of depression 57 per cent., and that of division, or breaking up, 82 per cent.—*Gazette Hebdomadaire*, No. 45.

Acupuncture of the Heart in Suspected Death.—M. Plouviez having performed numerous experiments upon animals, with the object of determining the value of acupuncture of the heart as a means of diagnosis in apparent death, a committee appointed by the Paris Medico-Practical Society terminates a long report with the following conclusions:—1. Acupuncture of the heart employed as a means of distinguishing real from apparent death is an improvement upon auscultation, inasmuch that it is a means more easy of observation and of greater precision, for even when auscultation leads to the belief of the inertia of the heart's action, the needle may, by its oscillations, demonstrate that the action still exists. 2. As far as the experiments on animals prove it, there is no danger in the employment of this means. 3. The oscillations, even after auscultation has proved of no avail, denote the probability of the return of life, the certainty and rapidity of such return depending upon the circumstances which have caused death and the means employed to secure recovery. 4. The exact determination of the amount of utility derivable from the employment of the needle can only be arrived at after future investigations.—*Union Méd.* No. 131.

PROVINCIAL CORRESPONDENCE.

BIRMINGHAM.

November 9.

Those of your readers who have not mastered all the details of the "Medical Directory" may not unprofitably be reminded that we have here two large Hospitals,—the General and the Queen's,—a Dispensary and a Lying-in Hospital, besides small institutions for Club-foot, Deafness, and Diseases of the Teeth. For its magnitude and historical *prestige* amongst similar institutions in the provinces, the Eye Infirmary deserves separate mention, as does the Children's Hospital, on account of its very recent foundation. We have also two Medical Colleges,—the Queen's and the Sydenham, and two Medical Societies,—the Midland Medical Society and the Branch of the British Medical Association.

Although it was to be feared that the new Regulations of the Medical Council, rendering compulsory the Preliminary Examination, would, for the time being, diminish the entries at the Schools, the Session was entered upon in an earnest and cheerful spirit, it being generally felt that, whatever the immediate result, the Profession must continually, and at no distant period, be greatly benefited by the exclusion of aspirants insufficiently educated to enter upon its study. At both Schools a new and *special* Professor was put forward for the Introductory: at Queen's, Mr. John Clay; at Sydenham, Mr. Thomas Hawkins. Both addresses were singularly good, worthy, indeed, of any two Schools in the Metropolis.

The Societies have also commenced their labours: the Midland with a throng of new members, and a pile of original communications, of which one of the most important and valuable hitherto read is certainly Mr. Langston Parker's, "On the Use of Mercury in the Treatment of Primary Syphilis." The principal facts inculcated by the author are embodied in the subjoined *résumé*:—

1. That mercury is not indicated as a specific agent in the treatment of the soft or simple chancre which secretes pus freely, which has no induration of its base, and no complication in the groin.

2. That mercury is not indicated as a specific therapeutic agent in the treatment of the adenitis which complicates this form of chancre, whether the tumour be of a benign or virulent character.

3. That mercury is not indicated in the treatment of the inguinal chancre which succeeds to the opening or the bursting of a virulent bubo.

4. That mercury may be tried when this form of chancre, or the attendant inguinal chancre, is perfectly chronic, and has resisted the usual routine of non-mercurial treatment. In the earlier stages of these diseases mercury is positively injurious; but in the perfectly chronic stage, as a *dernier ressort*, it may be tried, and occasionally, but not certainly, its use is attended with benefit. In such states a moist mercurial fumigation is sometimes efficacious—a fact which Mr. Parker has ascertained in several instances.

5. Mercury is occasionally useful in the treatment of the phlegmoid induration which sometimes accompanies soft chancres; here its action is limited to the removal of the induration; it has no influence in dispersing either of the forms of adenitis which may complicate it.

6. Mercury is indicated as a specific agent in the treatment of the infecting or specifically indurated chancre. It is the most powerful and certain therapeutic that can be opposed to it. It resolves the indolent buboes which almost always accompany this chancre, and which remain stationary or continue to increase until mercury is used. It weakens or altogether eradicates the dyscrasia, or constitutional taint, of which this chancre is the initiatory symptom.

7. Mercury may be given internally, and by way of friction, or administered in the form of vapour. There are cases in which each of these modes may find its special application. Generally speaking, the internal administration is the most injurious to the patient and the least efficacious in its influence on the disease.

At the first meeting of the Association Branch, Prof. John Clay read an erudite and eminently practical paper on "Accidental and Unavoidable Hæmorrhage during Pregnancy." He unhesitatingly believed that many of the cases generally viewed and treated as accidental hæmorrhage were of the unavoidable form, and required a special plan of treatment. He relied mainly on the use of the plug, and gave concise directions for its employment. To podalic version, as a rule, he objected, and urged that it frequently led to the death of the mother. In unavoidable hæmorrhage, Professor Clay, with but few exceptions, adopted the pathological and therapeutic precepts of Dr. Barnes, characterising them as one of the most scientific and valuable contemporary contributions to obstetric science. Entire detachment of the placenta he considered to be rarely practicable. In accidental hæmorrhage he advocated the use of the uterine dilator, as the most efficient. By these methods, with the aid of suitable collateral therapeutic measures, Professor Clay was sanguine that the maternal and fœtal mortality now prevailing might be very materially reduced.

In his clinique at the Queen's Hospital, Dr. Fleming has frequently made the cause and cure of tape-worm the subject of clinical remark. This affection prevails to a wide extent in Birmingham, and is often seen in its more severe forms among the out-patients. As compared with Edinburgh, Dr. Fleming observes, that the greater frequency and severity of the disease are very marked. The patients may often be recognised on entering the consultation-room by their worn, vacant aspect,—their trembling gait and hands, staring eyes, and hesitating manner. Many suffer for years, with alternate periods of aggravation and improvement. Of the relation of cause and effect between the measle of the pig, or *cysticercus cellulosæ*, and tape-worm, this town affords ample evidence. Dr. Fleming has ascertained that large quantities of measly pork are sold and used as food in Birmingham. It is not exposed for sale in the public markets, but is disposed of privately, and, doubtless, much of it is employed in the manufacture of sausages. These are made use of to a large extent by the working classes, and are frequently eaten imperfectly cooked or nearly raw. Dr. Fleming and Mr. Lloyd have found portions of the "measle" in the sausages with the microscope. Although the worm must be for the most part destroyed in the mincing, it may sometimes escape

sufficiently intact to renew its life in the bowels of an unhappy artisan.

Dr. Fleming has made comparative trials of several vermicides in the tape-worm; amongst others of male fern, kamala, koosso, and spigelia. All are useful, but Dr. Fleming finds the first to be the most efficient and the safest. He gives it thus:—℞ Ol. filicis, ʒj; mist. acaciæ, ʒss; M. ft. haust. To be mixed with an ounce and a-half of sweet milk and taken at bed-time. The patient must omit the dinner and evening meal of that day. Taken thus, on an empty stomach, the mixture is carried speedily into the intestines, to feed, and, at the same time, poison the hungry parasite which nestles there. Milk is the favourite food of the worm. A large experience leaves no doubt of the great efficiency of this medication. In 1857 Dr. Fleming obtained a supply of the kamala from Dr. Anderson, of the H.E.I.C.S., and was one of the first to use that drug in this country. As a worm-killer, it is often very efficacious, but less so than the male fern; while its action on the bowels and secondary depression of the system are often unduly severe.

At the General Hospital, Mr. Oliver Pemberton, five weeks ago, excised the os calcis in a young married woman. The bone was affected by scrofulous softening, but the remainder of the foot was in a perfectly healthy condition. In the operation the incision was made on the outside, and care was taken not to divide the tendo-Achillis, but to leave it attached to the fibrous textures of the heel. The patient, after suffering from severe constitutional disturbance, and the formation of abscess in the adjacent cellular membrane, is now convalescent, the wound being all but sound, and the movements of the ankle-joint natural. At the same time a young lad, of 19, met with an accident by which the elbow-joint was laid open and the oleeranon process cut off. Mr. Pemberton further removed the end of the humerus, leaving the head of the radius untouched. It is somewhat doubtful, however, whether the laudable endeavour of saving the limb will prove successful, as the wound is still very extensive, and contraction proceeds slowly.

I had an opportunity of seeing a case in the Queen's Hospital this morning of considerable interest in relation to the still pending question of the treatment of fractures. The patient, a robust carter, aged 30, was admitted under Mr. Gamgee's care, on the 3rd ult., having just previously sustained a fracture of the right leg by a kick from a horse. Shortening to 1⅞ inch; increase in circumference, 1 inch; seat of injury, middle of the leg; great comminution of both bones; over the tibia a small wound, bleeding freely, in which a fragment projected; violent muscular spasm. Mr. Gamgee effected reduction immediately, and applied the starched apparatus from the middle of the thigh to the foot. On the 7th, the case, being somewhat loose, was opened and re-fitted; on the 8th, four days after admission, the man, having meanwhile been perfectly comfortable, raised the injured limb from the bed without any aid. On the eleventh day after admission he left his bed, and this morning the wound was quite healed, the bones solid, and the two limbs of identical length and shape. Such, remarked Mr. Gamgee to the students at the bedside, are the effects of immobilization and compression in the treatment of the most serious cases of fracture.

Schuft's method of removing senile cataracts by the performance of iridectomy, and then immediately "out-scooping" the lens substance with a silver spoon of the shape of a frying-pan, has been introduced into the practice of the Birmingham Eye Institution by Mr. Vose Solomon. The cases he has selected for trial of the plan, have been either of feeble constitutional power, from want of proper sustenance, or where the eyes were considered to be not perfectly healthy. Mr. Solomon's experience does not at present tend to the conclusion, that the results of this method are at all equal to what would be expected from it on *à priori* grounds; neither does he consider that by it the extraction of cataract will be rendered more available to Surgeons who would fear to treat the disease by a full section of the cornea. In cases which would be favourable for the ordinary method of treatment, but which are complicated by the presence of chronic cough—frequent and violent, or in patients in whom there is a disposition, from heart disease, to venous congestion of the cerebral circulation, Schuft's method presents without question, in Mr. Solomon's opinion, certain advantages which should not be disregarded by the practical Surgeon.

GENERAL CORRESPONDENCE.

CASE OF UTERINE HYDATIDS.

LETTER FROM MR. TWEEDALE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to enclose a brief report of a case of hydatids in the uterus:—

On August 24 last, I was called upon to attend Mrs. ——, aged 33, in her third confinement. On arrival, I found her almost pulseless, from excessive hæmorrhage. On enquiry I ascertained that she had suffered from hæmorrhage for twenty-five weeks previously, but not to such an extent as to require Medical assistance.

Externally the uterus seemed very much distended, in fact the woman was under the impression that she would have twins, and had an idea that she could feel their movements. On making an examination per vaginam, I found the os uteri dilated to the size of a half-a-crown piece, but could not distinguish any presentation. Fearing danger from the continued hæmorrhage, I at once introduced my hand into the uterus, for the purpose of turning the fœtus if necessary, and was surprised to find its contents break down under very slight pressure.

Having satisfied myself there was no fœtus, I withdrew a portion of the contents, and found them to be hydatid cysts, averaging the size of full-grown grapes. I then re-introduced my hand into the uterus, and removed the whole of them, weighing between five and six pounds. The uterus at once contracted, and the hæmorrhage ceased. In a few hours the mammary glands performed their functions, and the case proceeded as one of natural labour.

No unfavourable symptoms setting in, the woman rapidly recovered, and when I last saw her she was following her usual employment. I am, &c.

THOMAS TWEEDALE, M.R.C.S. Eng.

Uppermill, Manchester.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, NOVEMBER 5.

DR. COPLAND, President, in the Chair.

MR. CARR JACKSON exhibited a specimen of

DISEASE OF THE FEMUR.

It was taken from the body of a man who died at the age of 61. Ten years ago his leg had been amputated above the knee for crush of the leg by a waggon. The stump never fairly healed. It was said that one piece of dead bone had been removed. The tissues of the thigh and bone were all welded into one solid mass. The muscular fibres were in a state of fatty degeneration, the bone much thickened. The bone weighed sixteen ounces, a healthy, entire femur, Mr. Jackson said, only weighing eighteen ounces. The cartilages of the hip-joint were absorbed, and the ligamentum teres was gone. In the upper part of the bone was an abscess, the cavity lined by a pyogenic membrane.

MR. CANTON exhibited a specimen of

ANEURISM OF THE ASCENDING AORTA BURSTING INTO THE PERICARDIUM,

taken from a man aged 72, who had suddenly fallen down, and was brought into the Charing-cross Hospital in a state of insensibility. The surface of the body and extremities was quite cold, and the pulse and respiration were scarcely perceptible. Under the use of warmth and stimulants, he rallied, but shortly afterwards began to sink, and died gradually in an hour after admission. The pericardium contained upwards of nine ounces of blood, which had escaped through a very small aperture in an aneurism of the ascending aorta, near the semilunar valves. This vessel was everywhere encumbered with atheroma and calcareous deposits. Towards the right side and posterior part of the aneurismal sac was a

longitudinal fissure of its walls, about two inches in length, passing through the entire thickness of the coats, but leaving the pericardial investment intact. Mr. Canton referred to the recording of a similar case by Dr. George Johnson in the first volume of the Society's "Transactions."

Mr. Henry Thompson exhibited for Mr. Joseph Thompson, of Nottingham, a specimen of

LARGE RENAL CYST.

A gentleman consulted Mr. Joseph Thompson, ten years ago, for great pain, tenderness, and enlargement in the left renal region. There were also other symptoms usually found in connexion with diseased kidney. It was ascertained that a similar condition, when existing on a former occasion was suddenly relieved after the passage of a very large quantity of urine of the colour of port wine. This took place again in about a week. In less than a year from this time the swelling again appeared, but to so large an extent that dulness and obscure fluctuation were felt on the left side, from the spine to the linea alba, and pressing upwards the heart. After careful consideration, Mr. Joseph Thompson, believing it to be a cyst connected with the kidney, made a puncture into it by a trocar, between the last two (floating) ribs, drawing off eight quarts of dark fluid. This being done, more of the same kind of fluid flowed by the natural passages. The operation was repeated in 1852, seven pints being removed. The patient now appeared to recover, but in 1860 accumulation again took place, and in March of that year seven quarts were withdrawn by tapping. Mr. Thompson did not see the patient again until September 23, 1861, when all the symptoms were found present as before. On October 5 the patient was suddenly seized with severe abdominal pain and severe constitutional symptoms. Micturition was difficult; the abdomen was tense. Calomel with large doses of opium were administered, and at first he improved, but ultimately he died on October 10. On opening the abdomen, abundant marks of peritonitis were found, and three pints of dark fluid, like that which had been evacuated, were removed from the abdominal cavity. A large sac in connection with the kidney was found occupying the left lumbar region, and above and below it. Four pints of fluid still remained in the sac, and it was evident that rupture of this sac, causing peritonitis, had been the cause of death. A little loose body, which was dried and inspissated lymph, was found in the sac. There was a history of the passage of several calculi by the patient, but none had been seen during the last ten years. The sac when distended pressed on the orifice of the ureter, which entered it obliquely, so that no fluid could pass by that canal. When the sac was partially emptied, the remainder of the fluid could then easily pass.

Dr. Gibb had recently seen a case very like this. The patient was twice tapped, and on one occasion tincture of iodine was injected. In this case a large quantity of the fluid was at one time passed by stool. It turned out that there was a large dilatation of the pelvis of the kidney, consequent on impaction of the ureter by a calculus. A scar, where the cyst had communicated with the bowel, was found, but no opening.

In reply to Mr. Nunn, Dr. Gibb said, that the fluid drawn off by tapping was not urinary. It did not contain any urea.

Mr. Henry Thompson said that the fluid from the cyst he had exhibited had, by mistake, not been examined.

Mr. Nunn remarked that the analysis of this fluid in a case like that related by Dr. Gibb would tend to clear up the diagnosis, as when the duct of a secreting organ was occluded, that organ ceased to secrete.

Dr. Gibb referred to a case, the specimen taken from which he had brought before the Society, in which saccharine urine was found in the pelvis of one kidney, and albuminous urine in the other.

Dr. Crisp then brought forward specimens of

TUBERCULAR DISEASE OF THE LUNGS, LIVER, AND SPLEEN, IN AN ENTELLUS MONKEY.

He showed also casts of these specimens in wax, and adverted to the advantage of such an easy method of obtaining exact representations of recent specimens. The animal from which the specimens were taken was in tolerable condition before death, although it was found afterwards that all the organs mentioned were full of tubercles. In the spleen were many collections of curdy matter, which, under the microscope, was found to be tubercle and cholesterine. In the blood also cholesterine was found.

Dr. Crisp also exhibited a specimen, showing

PERICARDITIS IN A GREY PARROT.

Pericarditis, he remarked, was common in birds. In reply to Dr. Hare, Dr. Crisp said that the monkey was in its third or fourth year; and in reply to Dr. Gibb, he stated that he had dissected seventy monkeys: although tubercular disease was the most common cause of death in monkeys, yet they frequently died from other affections.

Dr. Copland spoke on the great interest of the study of the pathology of lower animals. He believed that the common cause of death in monkeys was tubercular disease.

Dr. Murchison then exhibited two specimens of

RUPTURED LIVER.

They were taken from patients who died in the Middlesex Hospital of injuries received in the accident on the North London Railway. In one of the cases the patient was a boy, aged 8. He had sustained many other injuries. The liver was ruptured in the usual situation, viz, at the upper and back part of the right lobe. Blood was extravasated into the peritoneal cavity. In this case, also, although no ribs were hurt, there was extravasation of blood into the pleura. The other specimen was taken from a lad, aged 19. In this case the diaphragm also had been ruptured, and the left lobe of the liver, and nearly the whole of the stomach had passed into the right side of the thorax, displacing the lung. Food was found in the peritoneal and pleural cavities, the stomach having been ruptured.

Dr. Murchison said, that the stomachs of all the patients he had examined who had been killed in this accident, were full of food. There were no traces of post-mortem digestion.

In all the cases the blood was perfectly fluid, not only the blood in the veins, but that extravasated. The examinations lasted two hours, and were made forty-four hours after the accident. John Hunter had, he said, long ago pointed out that in cases of sudden death from blows on the epigastrium, the blood remained fluid.

In reply to Dr. Crisp, Dr. Murchison said that there were ecchymoses all over the body. In the case of laceration of the diaphragm, there was ecchymosis, but no wound. In reply to Dr. O'Connor, he said that death was immediate.

Dr. Copland said that in case of injury to the internal organs supplied by the great ganglial system, the blood did not coagulate after death.

Dr. Peacock exhibited a

HEART WITH AN OPEN DUCTUS ARTERIOSUS.

The specimen was removed from a man thirty years of age, whose previous history was not known, and who died suddenly at St. Thomas's Hospital before he could be placed in bed. The heart was of large size, and presented marked hypertrophy and dilatation of both ventricles, but more especially of the right. It weighed 20¼oz. avoirdupois. The pulmonary artery was of full size, and gave origin to the ductus arteriosus in the usual situation; the latter was freely open, and of sufficient capacity to give passage to a writing quill. The whole aorta was of small size, but the ascending aorta was relatively large. Beyond the origin of the left subclavian artery the vessel diminished considerably in capacity, and expanded after the entrance of the ductus arteriosus. Dr. Peacock regarded the case as an example of a permanently pervious condition of the ductus arteriosus resulting from congenital contraction of the portion of the aorta distal to the left subclavian artery.

The same gentleman also exhibited a specimen of an

ANEURISM OF THE DESCENDING THORACIC AORTA,

which had produced laryngeal symptoms from pressure on the left recurrent nerve, had given rise to hæmoptysis from involving the lung, and finally produced death by rupturing into the left pleural cavity. The man, a scaffold builder, from whom the specimen was removed was thirty-five years of age. He was received into St. Thomas's Hospital on the 12th of June last, and had then suffered from dyspnœa for twelve months, but was able to follow his work till a week before his admission into the Hospital. When first seen he had considerable dyspnœa, increased on exertion; spoke with a peculiar hollow, interrupted, and feeble voice;

and had a loud, ringing cough. There was a prominence of considerable size below the middle and outer end of the left clavicle, and the sound on percussion was there entirely dull; respiration was abolished, and replaced by abnormal pulsation and feeble double murmur. The left external jugular vein was also much distended. At the base of the heart there was a feeble diastolic sound, propagated down the left side of the lower part of the sternum; and the pulse was somewhat of a regurgitant character, but equal in the two wrists. Some time after his admission he began to spit blood, and continued to do so for a considerable period, but never in large quantities. The left radial pulse also became fuller and firmer than the right. While in the Hospital the external prominence almost entirely disappeared. He died suddenly by syncope on October 29, having been first taken with faintness and insensibility at about one o'clock in the morning. From this state he rallied in about an hour, and then suddenly expired, while getting out of bed at about seven o'clock. The aneurismal sac was found to arise from the descending portion of the arch of the aorta, immediately beyond the origin of the left subclavian artery. It involved the posterior and right side of the vessel, and was of an oblong form, its largest diameter being about three inches, and from above downwards it was fully the size of a large orange. On the right and posterior part it had pressed upon the bodies of several of the vertebræ, causing their denudation and absorption. On the left the sac involved the upper lobe of the left lung; it had also compressed the main branches of the lower lobe, and so caused collapse of that portion of the lung. The aneurism had opened by a small aperture, not larger than would admit an ordinary probe, into the cavity of the left pleura, and about four pounds of coagulated blood were found in that cavity. The left recurrent laryngeal nerve, when making its turn round the aorta, must have been compressed between the vessel and the sac. The upper part of the sac rose above its point of origin, and formed the prominence observed beneath the clavicle during life. The heart, and especially the left ventricle, was somewhat hypertrophied and dilated. The aortic valves were thickened, and the right segment was introverted and contracted at its free edge, and was considerably beneath the level of the other segments, so as to allow of regurgitation from the aorta into the ventricle. The results of the examination after death very fully illustrated the various symptoms which had been observed during life.

Dr. Crisp asked Dr. Peacock if he did not think that bleeding would have prolonged life?

Dr. Peacock said he believed that Dr. Stokes's view was correct, viz. that to favour coagulation, the strength should be supported. In this case at all events, in which there was aortic regurgitation, bleeding could not have been beneficial. Quiet and anodyes would, he thought, be better means. Dr. Hughes Bennett had recently recommended bleeding.

Dr. Crisp said that he thought bleeding would have been beneficial in this case.

Dr. Copland alluded to a case of aortic aneurism following a violent blow on the back, which he had treated on the principle of rest, and with great temporary benefit.

Dr. Risdon Bennett then exhibited a specimen of

DISEASED HEART.

In this case during life, there had been the symptom of aggravated disease of the heart, and yet after death very little disease was found. The patient was a boy, under Dr. Bennett's care, in St. Thomas's Hospital. Until an attack of rheumatic fever, five months ago, he had had good health. From that time his general health failed, and he suffered from dyspnœa. Ultimately the circulation was so much interfered with, that his lips became livid and his body generally anasarcous. On examination of the chest, there was not much general congestion of the lungs indicated. The action of the heart was excited, and the region of cardiac dulness increased. There was a systolic bruit at the apex, and a double bruit at the base extending most to the right side, and on the left rather of a friction character. The immediate cause of his death was hæmorrhage from the lungs. After death less alteration in the heart was found than had been expected. One curtain of the aortic semilunar valves was found to be incompetent.

Dr. Montgomery showed the

SUPRA-RENAL CAPSULES

and portion of skin taken from a patient who died of Addison's disease. The patient, a boy, aged 14, had been considered healthy until four months before death, when he began to become weak and his skin dark. He was admitted, under Dr. Barker's care, one week before his death. He was then emaciated, but had no pain. In this case there was desquamation of the skin. The patient died apparently from great weakness, and after death no lesions, except those of the supra-renal capsules and kidneys, were found.

In reply to Dr. Copland, Dr. Montgomery said that the blood had not been examined.

Mr. Nunn exhibited

CASTS SHOWING THE CONDITION OF THE TEETH IN TWO SUBJECTS OF HEREDITARY SYPHILIS,

respectively aged fourteen and eight years, as further evidence on the question of the influence of syphilis over the development of the permanent teeth. The upper central incisors in both specimens were more or less imperfect in their formation, but did not show in any very marked degree the typical peculiarities stated by Mr. Hutchinson to be diagnostic of hereditary syphilis.

In reply to the observations of various Fellows of the Society, Mr. Nunn said he wished it to be distinctly understood that he did not exhibit the specimens as good examples of the peculiarities described by Mr. Hutchinson, but simply as being taken from the mouths of patients undoubtedly syphilitic.

Dr. Dickinson exhibited a specimen of

HYDATIDS IN THE HEPATIC DUCT.

The patient was a woman, aged 18, who had died recently in St. George's Hospital. On admission she was jaundiced, and on examining the region of the liver a projection from its lower surface was found, about the size of a cricket-ball. After death it was found that the common duct had been plugged by hydatids. There was a tendency to extravasation of blood in various parts. During life there had been considerable hæmorrhage after the application of leeches, and also a considerable flow of blood from an ulcer on the leg.

Mr. Shillitoe exhibited a specimen of

CANCEROUS STRICTURE OF THE ŒSOPHAGUS.

The patient was a fish salesman at Billingsgate, aged 50. He had enjoyed good health until five months before his death, when he first complained of some difficulty in swallowing solids. This rapidly increased, and for the last two months he was kept alive by liquids and nutrient enemata. The stricture was found to commence exactly on a level with the bifurcation of the trachea, and extended downwards for about two inches. It just admitted a No. 4 bougie: when laid open an ulcerated surface was exposed, grey, soft, and pulpy. Between the strictured portion and the adjacent descending aorta the areolar tissue was infiltrated by hard cancerous material, and in the aorta itself a corresponding longitudinal projection existed, caused by infiltration between the coats of the vessel, which at this part had a thickness of more than a quarter of an inch. Under the microscope the diseased structures presented numerous large cells of varied forms, with one or two distinct nuclei, and many of the cells were fusiform.

Dr. Harley exhibited the

UTERUS AND UTERINE APPENDAGES OF A WOMAN WHO DIED AT THE CATAMENIAL PERIOD.

A married woman, aged 23, healthy, drowned herself on October 31. The uterus and appendages were found to be congested, the coverings of the Fallopian tubes very much so. The interior of the uterus contained blood, especially at its fundus and towards the mouths of both Fallopian tubes. The latter contained none, but towards the fimbriated extremities a milky fluid, which, on examination, was found to be mucus containing much ciliated epithelium. Both ovaries contained Graafian vesicles. In the left the vesicle was as large as a hazel-nut, and was on the point of bursting. It burst in handling it. Fallopian tubes quite open. The opening next the ovary would admit a mustard-seed readily. In this case, Dr. Harley remarked, the menstrual blood was clearly seen to come from the uterine mucous membrane, and to be chiefly secreted at the fundus. It showed also the great functional activity of the generative organs during the menstrual period.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, NOVEMBER 6.

DR. TYLER SMITH, President, in the Chair.

TWENTY-EIGHT gentlemen were ballotted for and duly elected as Fellows.

Dr. J. BRAXTON HICKS exhibited some instruments, made under his directions by Durroch, of St. Thomas's-street, London-bridge, for the removal of polypi, cauliflower growths, cervix uteri, hæmorrhoids, etc. Their principle consisted in the adaptation of rope, made of annealed steel wire, to the shaft of a screw-écraseur, whereby the flexibility of the rope was combined with nearly the strength of the chain. Dr. Hicks said he had made experiments with a variety of materials, and considered the annealed steel wire that which combined the greatest strength with the most flexibility.

Dr. OLDHAM then exhibited a large Fibroid Polypus of the Uterus, which he had lately removed with Dr. Hicks' larger instrument. The tumour completely filled the vagina, distending it above the level of the brim. The rope was carried around its neck by the hand passed into the vagina, and the section completed without difficulty or hæmorrhage.

Dr. TYLER SMITH observed, that if the annealed steel wire were stronger than other wire, Dr. Braxton Hicks would have rendered essential service in the treatment of polypus. He had himself for many years abandoned the use of whip-cord for wire in the removal of polypus and cauliflower excrescence. His instrument was made on the plan of Gooch's, but sufficiently strong to cut through the tumour at once. He had used plated copper-wire, or hard iron-wire, both singly and stranded.

Mr. SPENCER WELLS, in reply to a question from Dr. Hicks, stated that the wire cord he had used was made by stranding together from six to ten lengths of the ordinary Sheffield iron-wire introduced by Dr. Simpson. He (Mr. Wells) had removed fibrous polypi easily by this cord, and had once cut through the cervix uteri without difficulty. He had used the screw-écraseur for tightening the cord, and the tourniquet-screw; but he thought the double sawing action of Mathieu's rack-écraseur was better than the simple screw used by Dr. Hicks. In one case the tumour was sawn off; in the other simply squeezed off.

Dr. GRAILY HEWITT exhibited a

POLYPUS OF THE UTERUS REMOVED BY THE ECRASEUR.

The polypus was pendulous in the vagina by a thin pedicle from the interior of the uterus, and was the size of an egg, having a flattened shape. There was no difficulty in the operation, which succeeded perfectly. The case was worthy of mention, inasmuch as it had been treated for about a year for prolapsus uteri, a pessary having been worn.

Mr. I. BAKER BROWN related

FIVE CASES OF OVARIOTOMY.

Case 1.—L. H., aged 21, single, admitted on August 29, 1861. Has had a tumour two years, and has been twice tapped. Was operated on September 19. There were no adhesions. Pedicle secured by a clamp, which was taken off three days afterwards, and the pedicle allowed to return. Never had a bad symptom. The opening, when healed, measured 3½ inches. The tumour, which was multilocular, contained seventeen pints of fluid. *Case* 2.—F. W., aged 19, single, admitted on October 7. Has had the tumour two years. Operated on October 24. There were no adhesions. Pedicle treated as in Case 1. Operation lasted barely ten minutes. Had only one grain of opium. Is now quite convalescent. Tumour of the multilocular character, and composed of one large cyst, containing fourteen pints of fluid, and a conglomerated mass of smaller cysts. *Case* 3.—C. S., aged 49, married, admitted on September 9. Has had the tumour six years, and has twice been tapped. Operated on October 31. Only one adhesion, in the direction of the liver, which was tied with a ligature. Is now doing well. Has had one grain of opium nightly since operation. Pedicle treated as in Case 1. Tumour of multilocular character, and weighing 1 lb. 11 oz. It consisted of two cysts, with very thin walls, containing between eleven and twelve pints of dark albuminous fluid, and several masses of conglomerated cysts, varying in size from a walnut to an orange. *Case* 4.—M. A. M., aged 50, admitted on October 14. Is the mother of six children; is of very nervous and desponding temperament. Has had the tumour for three years. Operated upon October 31. The tumour weighed 6 lb. 14 oz., and was composed of a mass of honeycomb cysts. There were no adhesions above, but there was one in the direction of the liver, which was ligatured. The tumour was withdrawn with great difficulty, it having modelled itself to the form of the pelvis and being attached to the whole external surface of the fundus of the uterus. The pedicle was too large to be embraced by a clamp. One portion only was secured by callipers; the remainder divided into four separate portions, and secured by as many double ligatures. These were retained outside. There were also several large vessels ligatured. The surface of the tumour which was cut off measured 5½ inches by 3 inches. The patient never did well; nothing rallied her; and she sank forty hours after the operation. She had two grains of opium given her altogether. The autopsy showed very partial peritonitis and general congestion of the abdominal viscera. The whole surface of the pedicle was covered with clots, and there was also some blood in the cavity of the peritoneum. She evidently died from the great shock of the operation. *Case* 5.—M. T., aged 23; has had the tumour over three years. Operated on October 31. There were no adhesions. The patient has not had a bad symptom, and is already convalescent. These cases make a total of fourteen operations for ovariotomy performed in the London Surgical Home, of which ten have been successful, should that operated on six days before the meeting continue to do well.

Mr. SPENCER WELLS presented a female bladder showing the results of

RETENTION OF URINE AFTER DELIVERY.

The coats of the bladder were thickened; and, lying loose in the cavity; there was found a mass, composed of the whole of the mucous membrane, detached from the muscular coat, and covered on both sides with a deposit of the saline elements of urine. Microscopically, this mass might be described as degenerate epithelium holding together saline deposit. On boiling a piece of it in twenty parts of water to one of acetic acid, much of the saline matter is dissolved, and some of the tissue becomes clear, looking like smooth muscular tissue which has begun to degenerate by the deposit of fatty or albuminous particles in its substance. The case was a very painful but most important one; and Mr. Wells brought it before the Society by the express desire of the father of the patient (a highly-esteemed member of our Profession) in order to impress upon all the lesson that a valuable life may be lost, and the Surgeon's reputation also, if the catheter be not promptly used whenever urine is retained in the bladder, especially during or after labour. This lady was perfectly healthy, 22 years of age, and was taken in labour with her first child, at her home in the country, on the morning of August 20 last. The pains were trivial until the evening. At half-past eight the membranes broke, and the child was born at forty minutes past nine. The placenta soon followed. The nurse had told the Medical Practitioner in attendance that the lady had been unable to pass urine during the day; but he "did not heed it." Two hours after delivery there was much pain, and distressing desire to micturate, which continued the whole night, and no sleep. The next morning the abdomen was large and tense below the umbilicus. Fomentations and diuretic draughts were ordered. At night an attempt was made for the first time to pass the catheter; but it was unsuccessful. The patient passed a most distressing night, was left all through the next day unrelieved; but at night another Surgeon was brought, who at once introduced the catheter, and removed five pints of turbid bloody urine. The bladder was not relieved until forty-eight hours after delivery; and no urine had passed for fourteen hours previous to delivery. The catheter was introduced two or three times a-day for some time. The urine became ammoniacal, and remained so. On August 31, she had a severe rigor. Two or three days afterwards the urine began to dribble away involuntarily. About September 12 it was supposed that she was the subject of vesico-vaginal fistula, and she was brought to town on Sept. 21 in order that Mr. Wells might operate on this fistula. But it was found that there was no fistula, the

incontinence of urine depending solely upon disease of the bladder. A train of very distressing cerebral symptoms followed, for which she was attended by Dr. West and Dr. Arthur Farre, with Mr. Wells, and she died on October 16. Mr. Wells added, that he hoped the sad end of this lady, the anguish which her father, her husband, and all her family had suffered, and the distress of the Surgeon at the loss of a reputation he had worked through a long life to obtain, would assist in impressing upon everyone to whom human life is intrusted the duty of learning "little things." All the miserable suffering and the early death of this poor lady were due to the simple fact that her attendant had never learnt how to use the female catheter.

Dr. Tanner considered that, as death had not followed until two months after delivery, and cerebral symptoms had supervened, the neglect in using the catheter could not justly be regarded as the real cause of death. He thought that it was by no means certain that the Surgeon in attendance was so much to blame as at first sight appeared from the history of the case just given. He was sure that we ought to be very careful how we cast obloquy upon any gentleman.

Mr. Spencer Wells replied, that so far from there being any disposition to blame the gentleman unduly, Dr. West and he (Mr. Wells) had been the means of stopping legal proceedings which had been commenced against him. Had not the lady's father been a Medical man the case would not have been brought forward; but, it being his desire that some good might arise from the case being made known to the Profession without mention of any names, Mr. Wells trusted that the lesson might not be lost, as all who saw the patient believed that the retention of urine was the cause of the disease of the bladder, and the disease of the bladder the cause of death.

Dr. Chowne agreed with Dr. Tanner in defending the Surgeon. He (Dr. Chowne) had frequently allowed urine to be retained many hours without resorting to the catheter, and he had never seen any serious result follow.

A Paper, by Dr. J. Marion Sims, was read on

VAGINISMUS.

By the term "Vaginismus" the Author proposes to designate an involuntary spasmodic closure of the mouth of the vagina, attended with such excessive super-sensitiveness as to form a complete barrier to coition. This affection may be complicated with inflammation, but it does not depend upon it; and in the most perfect examples which Dr. Marion Sims had witnessed, there was no such complication. Vaginismus can only be confounded with impermeable hymen, or with atresia. In each of these two cases marriage may have existed without consummation, but the true cause is patent on investigation. In an example of vaginismus the gentlest touch with the finger produces excruciating agony. The sensitiveness is at all parts of the vaginal outlet; but often the most tender part of all is at the fourchette just where the hymen projects upwards, or, again, at the orifice of the vulvo-vaginal gland. The treatment consists in the removal of the hymen, the incision of the vaginal orifice, and subsequent dilatation. The way in which these operations are to be performed was fully described; and the paper concluded with some general observations to show why the term "Vaginismus" had been chosen for this disease.

Dr. Oldham thought that there were few obstetricians of much experience who had not met with cases of a similar nature to those noticed by the author. He reminded the Society that some years ago he had described some cases where these painful symptoms were present, but which he had connected with inflammatory conditions of the follicles of the vulva. He had since that time kept a record of similar cases, and he did not call to his recollection any instance where there was not that condition present. He had found almost every case amenable to a sedative plan of treatment, and condemned the use of caustics.

Dr. J. Braxton Hicks had seen one such case in which the whole membrane of the vulva was rough with small papillæ; and he considered that the exquisite tenderness in this case was owing to a diseased condition of the sensitive papillæ.

Dr. Tyler Smith said that Dr. Marion Sims had given a name to a condition which he thought was far from uncommon in this country. Excessive sensibility and spasm of the vagina were sometimes quite distinct from vaginitis, and might be present when no disease of the mucous membrane existed. He had always considered it as hysterical spasm of the sphincter vaginæ, and treated it by division and dilatation. He had known such a condition interfere with intercourse for thirty years.

Dr. Tanner thought that the cases described by Dr. Sims and those alluded to by Dr. Oldham were quite distinct in their nature. As regards follicular inflammation of the vulva, Dr. Tanner was happy to bear witness to the accurate description of this troublesome disease which had been given by Dr. Oldham. Such cases were only to be cured by attention to the general health and sedative local applications. All irritating lotions or ointments did great mischief.

Mr. Spencer Wells could support Dr. Tyler Smith's statement, that these cases were sometimes seen without any follicular disease about the vulva. He had seen such a case where connexion had been impossible for three years after marriage. There was no hymen, or merely a rudimentary fold of mucous membrane offering no impediment. This case was completely cured by introducing one of Bourjeaurd's cylindrical air-pessaries under chloroform, and keeping up dilatation for a few days.

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, November 1.

The President in the Chair.

The Inaugural Meeting of the Session was held this evening, when Dr. Seaton thanked the Society for again electing him their President; at the same time he made some remarks upon their satisfactory state which had not sustained any loss among the members, but on the contrary, that during the year they had made some valuable additions to their numbers.

Dr. Anstie then read a paper on the

PROOFS OF LIVE BIRTH IN RELATION TO PROSECUTIONS FOR INFANTICIDE.

His object was to show that the frequent failures of justice which occur in trials for infanticide depend greatly on the character of the scientific evidence which is required to be adduced. Proof is demanded that the child was wholly born and alive at the time of the infliction of the alleged injuries, but the law leaves the declaration of what constituted proof of live birth to the Medical witnesses and the judge in each particular case. At the same time Medical men in this country seem at present to be hopelessly at variance with regard to what constitutes proof of live birth as is plainly shown by the late trial of Brock *v.* Kellock before Vice-Chancellor Stuart, in the course of which Dr. Lee and Dr. Ramsbotham gave a decided opinion that proof of respiration was necessary, while, on the other hand, Dr. Taylor and Dr. Tyler Smith considered that this was unnecessary, and that evidence of the continuance of circulation after birth proved the child to have been born alive. The question here raised as to the necessity, or otherwise, of the proof of respiration is an old one. In the time of Justinian the two great sects of Roman lawyers disputed it fiercely, but the Emperor cut short the matter by making a law to the effect that the child need not have been heard to cry (the old test of respiration) if any other sign of vitality had been observed, and if the child had been wholly in the world at the time. In France this edict was annulled successively by Dagobert and by Louis IX., and was at length completely set aside by the establishment of the Code Napoleon, which demanded proof of "viability," and which has been interpreted by all the most celebrated of modern French Medico-Legists as requiring evidence of respiration. In England and Scotland, the ancient custom of the Law Courts, as expounded by Bracton, Glarwil, and others, had plainly required proofs of cries; and in Scotland this practice had never been changed. (*Vide* Lord Stair, MacDowel, etc.) In England we first meet with an innovation in the established practice in the time of Henry VIII., when the Judges sitting in Common Bank decided that the proof of cries was not necessary to the proof of live birth, if other evidences of life could be produced. There is great reason to think that this decision was pronounced in deference to the ancient edict of Justinian, since it seems to have been based on the same reason which the Emperor assigns, viz., that the child might

possibly have been born dumb—a thing which is really impossible, as Chaussien, amongst others, has well shown. The next precedent, in the same sense, is the cause of Tyschc and Palmer, which was decided in 1806 in the Court of Exchequer, and on which muscular movements were held sufficient proof of live birth, although respiration had not taken place. Baron Parkc also, in a case of infantide, (Rex *v.* Brain, Norwich Assizes, 1837,) decided that proof of respiration was unnecessary, grounding his judgment on the possibility of a child being born asphyxiated, though really alive. Finally, we have Sir John Stuart's decision in Brock *v.* Kellock, where proof of the continuance of circulation after entire birth was held to be sufficient evidence of live birth. The author showed that these four isolated decisions of the English Courts against the necessity of adducing proof of respiration stand in opposition, not only to the practice of the Scottish Courts at all periods and of the English tribunals in former times, and indeed to this day in cases of infanticide, but they are in opposition to the opinions of all the most distinguished continental Medical jurists. Positive opinions in favour of requiring proof of the performance of respiration were cited from Fodéré, Orfila, Dubois, Pelletan, Casper, and others. Dr. Anstie then entered on the physiological argument. He contended for the essential distinction which is to be drawn between fœtal and independent life. The grounds for this distinction are, that immediately upon the occurrence of respiration, certain important anatomical changes take place in the body of the child, and that concurrently with these changes it commences to exhibit the phenomena of consciousness, and the attributes, however imperfectly developed, of independence. The phenomena of consciousness are not manifested in the slightest degree until respiration has commenced. All that occurs before the commencement of respiration by the lungs is nothing more than the evidence of fœtal life, a life which is not separate from, but a part of, that of the mother. If the fœtus be cast off before it has acquired the physical capacity for independent life, it may indeed palpitate for a short time, with that same sort of vitality which we see in the frog's heart which has been removed from the animal's body, but it is not alive as a separate being. The objection drawn to respiration as a test of independent life from the case of asphyxiated infants was considered. Asphyxia in the fœtus, equally as in the independent being who is strangled or drowned, depends on privation of oxygen. If this privation have been carried far enough (as in the case of protracted pressure on the funis during labours) the fœtus becomes so hopelessly poisoned with carbonic acid that its nervous system is unable to respond to the stimulus of the external air, or even if oxygen be introduced into the lungs artificially, it is unable to experience that first sensation of independent life, the *besoin de respirer*, no effort at breathing is ever made, no anatomical changes occur, the fœtus never becomes alive in the social sense. Physiologically speaking, it doubtless still retains for a short space of time a sort of vitality, a vitality such as that exhibited by the amputated limb whose muscles are still capable of being roused to contraction, but which in no way entitles it to be considered an independent human being. The opinions of Dr. Taylor and Dr. Tyler Smith, above quoted, are therefore incorrect. A child is not live-born unless it has breathed. Consciousness and independent life commence simultaneously with respiration. The Author advocated certain changes in the law relating to child murder. First of all, the proof of respiration should be declared by the Legislature to be necessary to the proof of live-birth; secondly, the absurd proviso that a child must be wholly disengaged from the vagina before it can be considered to be wholly born (a relic of Roman legislature), should be abolished, and the first moment of respiration should be considered as the announcement of legal life; thirdly, in order to meet the case of those infanticides who may prevent the occurrence of respiration by the infliction of injuries during delivery, the punishment of child-murder should be affixed to the guilty intent, even though the child was near live-born. The Author concluded with a summary of the evidence which may truly be said to prove the occurrence of respiration, and by showing that the definite establishment of the respiration test would be highly advantageous in relation to civil causes in which (as in the case of Brock *v.* Kellock) the succession to property depended on the question of the live or still birth of the child.

MEDICAL NEWS.

Royal College of Surgeons of England (a).—The following Members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on the 7th inst.:—

Name.	Residence.	Diploma Dated
Campbell, R. L.	Inverness	April 17, 1838
Jones, A. N.	Bideford, Devon	July 23, 1841
Lewis, James	Maesteg, Glamorgan	May 28, 1841
Michell, S. V. P.	Redruth, Cornwall	April 5, 1839
Prankerd, John	Langport, Somerset	February 16, 1838
Sampson, J. K.	Southampton	June 24, 1839
Slough, C. H.	....	April 20, 1838
Weston, R. P.	Wellington, Salop	May 3, 1831

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, November 7:—

Barham, Herbert Frederick Henry, Maidstone
Barker, Robert Arnold, Burton-street, Burton-crescent
Croft, Thomas Hardman Wilson, Snitterfield, Stratford-on-Avon
Mortimer, William, Kewellwell, Pembrokeshire
Sutton, Charles Frederick, Wragby, Lincolnshire.

The following gentleman also on the same day passed his First Examination:—

Booth, Frederick William, Ashmond Lees, near Manchester.

APPOINTMENTS.

Bader.—Mr. Bader has been appointed Assistant Ophthalmic Surgeon to Guy's Hospital.

Earle.—James Neale Earle, M.R.C.S. Eng., L.M., L.S.A. Lond., one of the District Surgeons of the Royal South London Dispensary, St. George's-cross, Lambeth, has been elected Surgeon to that Institution, *vice* C. W. C. Otway, F.R.C.S., resigned.

France.—Mr. France has been appointed Consulting Ophthalmic Surgeon to Guy's Hospital.

Farncombe.—Richard Farncombe, M.R.C.S. Eng., L.S.A. Lond., has been elected Medical Officer for the district comprising Balsall Heath, Mosely, and part of the parish of Kings Norton, in the Kings Norton Union, Worcestershire.

Maltby.—John Westbrook Maltby, M.D., Univ. King's Coll. Aberd., M.R.C.S. Eng., L.S.A. Lond., has been elected Physician to the Durham County Hospital.

Reardon.—Mr. Michael Reardon has been elected Apothecary for the North Dispensary district, Cork.

Bowman.—Henry Overend Bowman, M.D. Univ. Edin., L.R.C.S. Edin., has been appointed Physician to the Sunderland General Infirmary and Dispensary.

Head.—Edward Head, M.B. Lond., Scholar of King's College, M.R.C.S. Eng., L.S.A. Lond., has been appointed Physician to the North London Hospital for Consumption.

Hodgson.—James Birkett Hodgson, M.D. St. And., M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer and Public Vaccinator for District No. 1, of the Preston Union, Lancashire.

Poland.—Alfred Poland, F.R.C.S. Eng., late Assistant-Surgeon to Guy's Hospital, has been elected Full Surgeon. He has also been elected Surgeon to the Ophthalmic Department.

Thomas.—John Henry Thomas, of the St. Pancras and Northern Dispensaries, M.D. King's Coll. Aberd., L.R.C.P. Edin. (Exam.) M.R.C.S. Eng., and L.M., L.S.A. Lond., has been appointed Physician to the North London Hospital for Consumption.

DEATHS.

Bridges.—November 6, Gilbert Bridges, of Narborough, Leicestershire, Surgeon to the Leicestershire Yeomanry, aged 78.

Foulkes.—November 9, Edwin Foulkes, of Shrewsbury, M.R.C.S. Eng., L.S.A. Lond., J.P.

Geddes.—November 8, suddenly, William Geddes, of Laurel Bank, Elgin, M.D. Univ. King's Coll. Aberd., L.R.C.S. Edin, formerly Surgeon in the H.E.I.Co.'s service.

Geoffroy St. Hilaire, Isidore.—This celebrated naturalist, son of the still more celebrated Etienne Geoffroy St. Hilaire, has just died, at the age of 56, having been born at the Jardin des Plantes in 1805. Besides various other important posts, he was at the time of his death Director of the Museum of Natural History, Professor of Zoology to the Faculty of Sciences, and President of the Society of Acclimatization, of which he was the founder.

Ogilvie.—October 26, at Suez, George M. Ogilvie, M.D., C.B., Inspector-General of Prisons.

Roberts.—November 7, Avery Roberts, M.D., of No. 75, Grand Parade, Brighton.

Steel.—November 10, at Neville-street, Abergavenny, William Steel, late Surgeon R.N., aged 72.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

The General Association of Medical Practitioners of France.—This body, the object of which is to watch over the interests of the Medical Practitioners in France, and which numbers some thousands, has just received a donation of 400 francs from Sir Charles Locock.

Vital Statistics of Brussels for the Year 1860-61.—The population of Brussels amounts to 174,189, and during the year 4268 deaths were verified, of which number 1141 took place in the hospitals or prisons. The following are the chief diseases to which this mortality was due:—Phthisis, 788; hydrocephalus, 36; encephalitis, 299; bronchitis, 361; pneumonia, 156; hypertrophy of the heart, 254; enteritis, 440; gastritis, 88; diarrhœa, 4; convulsions, 180; typhus, 135; apoplexy, 139; cancer, 112; croup, 90; variola, 72. Suicides and attempted suicides amounted to 30, occurring in 28 men and 2 women, hanging being the means resorted to in 13 instances, shooting in 4, drowning in 7, cutting instruments in 4, poison in 1, and jumping from an elevation in 1.—*Presse Belge*, No. 46.

Leicester Infirmary.—The two Honorary Surgeoncies to this Infirmary, vacant by Mr. Paget's resignation and Mr. Macaulay's death, were filled up on Wednesday by the election of Messrs. Marriott and Crossley. The number of votes was as follows:—Marriott, 251; Crossley, 164; Paget, 125; Derington, 114; and Wood, 57. On the same day Mr. Rogers was elected House-Surgeon. The votes were—Rogers, 153; Wingate, 94; Greaves, 86; Phillips, 16; Richards, 1; Whitmarsh, 1.

The Late Dr. George Wilson.—"Many persons," says the *Telegraph*, "will share Prince Albert's regret that Dr. George Wilson did not live to see the opening of the new Museum at Edinburgh. Scotsmen will feel especially sad to think that the late Professor is not living to preside in the new Museum. Students will miss the quaint and kindly Professor of Technology. His was the poetic eye whose alchemy could transmute the most leaden look of things to a golden smile. Nothing was so commonplace but that he could lift up the film of familiarity, and give to it some gleam of beauty. The story of Science was a fairy tale, indeed, when heard from him, so rare and felicitous an illustrator was he."

The Apothecaries' Company.—The usual anniversary dinner in celebration of Lord Mayor's Day was held at Apothecaries' Hall on the 12th inst., and was honoured with the presence of a large number of distinguished visitors. Notwithstanding the differences which have recently arisen between some of the corporate body, the utmost cordiality and good feeling were exhibited on this occasion. The principal speakers representing the Medical officers and teachers at the different Hospitals, paid a graceful compliment to the Society of Apothecaries for their unwearied exertions in advancing to its present high standard the general and Professional education of the Medical men of this country. And it was admitted by all the speakers that under the competition and rivalry which has lately sprung into existence, the continuance of the examinations at the Hall, and the continued exertions of the Society, were as much required now as they ever were to maintain to regulate, and if need be, to further extend the course of Medical education in this country.

Belfast Branch of the Royal Medical Benevolent Society of Ireland.—On the 4th instant, the usual quarterly meeting of the committee of this branch of the above Society was held in the Belfast Medical Society's Library Room, the chair being filled by Dr. T. H. Purdon, the permanent local President. Dr. Browne, the Treasurer, reported that since the last meeting he had received a donation of £10 from an esteemed and eminent member of the Profession, who, however, requested that his name should not be made public. A conversation having arisen regarding one of the pensioners of the Society being now no longer a fit object for its bounty, it was arranged that, at the next annual distribution the name should be omitted for assistance. The subject of bringing before the nobility and gentry residing in this branch the objects of the Society, with the view of obtaining their support, having been discussed and agreed upon, directions were given to the Secretary to write to those parties, and earnestly request their countenance and pecuniary aid, and to report the result at the next meeting.

Children's India-rubber Balloons. — These beautiful coloured toys, now so abundantly produced, are, according to a paper read by M. Delpech to the Academy of Medicine, the source of much mischief to the workpeople employed in their fabrication. For the caoutchouc to attain this excessive dilatation by insufflation it is requisite that it should be dipped in a mixture of sulphuret of carbon and chloride of sulphur; and as this last substance only constitutes a hundredth of the mixture, it is to the sulphuret of carbon M. Delpech attributes the deleterious effects in question. These he had already pointed out, in a former communication to the Academy, as occurring in other manufactories in which the vapours of sulphuret of carbon are inhaled in considerable quantities in close workshops. The accidents are of a remarkable character, being dependent upon affections of the digestive and nervous system and manifesting themselves in the form of anorexia, vomiting and colics, of hebetude, loss of memory, nervous irritability, sensual disturbances, cephalalgia, impotence, and paralysis. On more closely observing these cases, M. Delpech finds that these conditions of collapse are preceded by a stage of excitement, inordinate appetite preceding the anorexia, excessive sexual desire the anaphrodisia, hyperæsthesia and pain the paralysis, etc. M. Delpech points out the analogy of the action of this substance and that of anæsthetics as ether and chloroform. —*Union Médicale*, No. 133.

Gun-Shot Wounds.—Our Transatlantic brethren now seem to feel themselves entitled to speak on this matter in an aphoristic style. A writer in the *Ohio Medical Journal* lays down the following maxims:—A wound from a rifle ball is usually more depressed and discoloured at the entrance than exit, the hole in the soft parts being less in diameter than the ball. The contusion takes the form of several concentric circles, the parts involved sloughing out successfully. If the speed of the ball is great, it is very difficult to distinguish between entrance and exit. Conical balls are seldom deflected; striking a bone they pass through it, taking the shortest course. Their wounds are more irregular, from the fact that they often receive their impulse in the direction of a diameter not parallel to the piece, and hence the side often strikes first instead of the end. It is said that a 32-pound ball will pass through 70 men, an 8-pound ball 40 men, and a one-ounce ball 4 men. It has been calculated that of all gun-shot wounds received in battle, there will be 2 in the abdomen, 4 in the neck or breast, 7 in the head, 10 in the arms, 4 in the hips or legs, 1 in the knee, and 2 in the feet. Nerves and blood-vessels, fortunately, generally escape injury. In field-works the proportion of killed to wounded is greater than in the open field, from the circumstance of the breast and head being more exposed. More men, or a larger portion of armies, were slain in battle in old times than at present, notwithstanding our improved fire-arms. When the losses reach 33 per cent. the battle is ended. They are said seldom to reach this figure, never going beyond it.

Death from Chloroform.—On Saturday, Mr. G. S. Brent, deputy coroner for West Middlesex, held an inquest at the Bank of England Tavern, Cambridge place, Paddington, on the body of Edwin Hambly, aged eight years, a native of St. Mabyn, Cornwall, whose death occurred while under the influence of chloroform on Wednesday, the 6th inst. Mr. Edwards, chloroformist to St. Mary's Hospital, deposed that he had held that position for the last eight years. The deceased was admitted to the Institution on the 25th ultimo to undergo a plastic operation to remove a great deformity, occasioned by a burn in the chin, which had the effect of drawing it down to an unusual degree, and turning the under lip inside out. On the day appointed for the operation, witness administered the chloroform gently. It took ten minutes to get the boy under its influence, and then the operation was commenced by Mr. Lane, the senior Surgeon. Just before the conclusion the deceased fainted, and, with a view to restore him, witness promptly commenced artificial respiration, which he kept up for half-an-hour. Failing in his efforts, he was put in a warm bath, and galvanism was applied for an hour and a-half, but without success. Witness believed that the poor boy died instantly he fainted, from paralysis of the heart. This was the first and only fatal chloroform case he ever had since the opening of St. Mary's Hospital, now over ten years, during which time

chloroform had been successfully administered to upwards of 4000 persons. In a post mortem examination they found all the organs healthy, and no trace of disease anywhere. Death was solely from paralysis of the heart from the effects of chloroform. In reply to the deputy coroner and jury, witness said he considered chloroform invaluable, and had applied it with the utmost success, even in cases of operations where the heart had been very much diseased, and where there was hardly a lung sound enough for the patient to breathe through. He never had a case die before from chloroform. The strangest part of this affair was that, when death took place, the boy was apparently recovering from the effects of the chloroform. Other Medical gentlemen who were examined fully corroborated the evidence of Mr. Edwards, and testified to his great experience, and his remarkable caution in the administration of chloroform. The jury returned a verdict that the deceased instantly died during the performance of a surgical operation upon him from the effects of a failure of the action of his heart, occasioned by chloroform accidentally and by misfortune.

Construction of Turkish Baths.—Mr. Bolton, in his annual report of the Newcastle Infirmary, says:—"In arranging a bath, the first consideration should be lofty rooms, well lighted and well ventilated from arched ceilings; seventeen feet is not too much for either the Tepidarium or Sudatorium; the skylights should be so arranged that both morning and afternoon sunshine may fall upon the floors, and illumine the rooms with the brightest light. The chemistry of sunshine ought not to be excluded from the bath in the way the Turks ignore it, but in each chamber the essentials to the richest exotic vegetation should exist. Ventilation should be effected through one large central aperture in the ceiling, guarded by a valvular door capable of regulating the egress of heated, and the ingress of cold air, to a nicety. No cross draught, *i. e.* side current, should be allowed on any account, or the bath may inflict the very mischief it is intended to relieve, that of giving cold. Heat the rooms with nothing but the pure air of heaven. Avoid getting heat at the expense of health and comfort as the Romans did, and the Turks do, by placing smoke-flues under the floors and round the rooms, which heat only the closely confined, noxious, and mephitic atmosphere of the bathing apartments; and render respiration difficult, dangerous, or disagreeable, to say the least; steam pipes, hot floors, and side flues, acting on the same principle, are objectionable, and ought not to be encouraged in any building dedicated to the purposes of the bath. To illustrate these views actually carried out, and in active operation, I would venture to refer you to my brother, Dr. John A. Bolton, of Leicester, who has recently, under his own architecture, carried out this method of building and heating bath-rooms, with the most satisfactory results, as far as economy in fuel, salubrity in heating, and regularity of ventilation are concerned. In his Tepidarium, at a distance of 33 feet from the hot air apparatus, a lucifer match, held over the opening of the hot-air ducts instantly ignites, without friction; at a similar opening in one of three hot-air ducts in his Calidarium, a pound and a-half of beefsteaks is deliciously cooked in ten minutes. At any of these outlets you may inhale, by a deep-forced inspiration, as much pure and fresh air as the lungs will hold, whilst the thermometer, swinging by a wire from your teeth, stands at 212° F. Air, at this temperature, diffused through two rooms, 16 feet by 16 feet and 17 feet high, maintains the thermometer at 110° and 150° respectively, at a cost of fuel of about eightpence a-day."

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 9, 1861.

BIRTHS.

Births of Boys, 840; Girls, 870; Total, 1710.
Average of 10 corresponding weeks, 1851-60, 1647·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	653	598	1258
Average of the ten years 1851-60	562·9	537 1	1100 0
Average corrected to increased population..	..	..	..
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	2	11	2	8	5	2
North ..	618,201	..	4	25	2	5	7	5
Central ..	378,058	..	1	21	4	11	10	4
East	571,129	1	2	26	4	8	15	6
South ..	773,160	..	5	28	7	13	7	7
Total.. ..	2,803,921	1	14	111	19	45	44	24

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Subscriber should apply to the Colonial Office.

Bristol.—It is not worth while to notice the advertisements of the *Aural Surgeon.*

Dr. Henry Osborne.—We think the paper well adapted for the pamphlet form, but scarcely for our pages. It would serve well as a popular lecture for a better sort of non-professional auditory.

C. T.—We have prescribed *Podophyllin* in doses of one grain, and found it a convenient purgative for children suffering under cerebral or abdominal congestion. It acted mildly but thoroughly. We have given it to adults, and found that it griped some persons severely, produced no effect at all on others, and acted very satisfactorily with a third set. We are not prepared from personal experience to assert its superiority to good scammony or to senna, which appear to resemble it the most in its cholagogue properties. No doubt calomel is often given because of the ease in administering it, by virtue of its tastelessness; but scammony is very nearly as convenient, and so is the finest watery extract of aloes.

Chloroform Accidents.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Two other sad deaths from chloroform will, I think, bear a few words of explanation and suggestion for the future. In the case at Brighton the muscular convulsion was excessive, which, as I said before, denotes black blood in the muscles, this black blood finding its way also into the coronary arteries; hence death from simple asphyxia. The suggestion here is that this "plunging" state, as I have called it in my book, always indicates more air for the patient and less chloroform. This asphyxia state runs parallel with the anæsthesia, but is not anæsthesia. Fatty heart is a mere dream.

In the case at St. Mary's Hospital, though in the hands of a most careful chloroformist, I would not have used the warm bath; it was markedly a case of syncope, with healthy heart, and a case for transfusion. In both cases probably tracheotomy as a *dernier ressort* would have been useful.

I am, &c.

43, Sackville-street, November 10. Charles Kidd, M.D.

P.S.—I agree with my excellent friend, Dr. Althaus, that it would be of the most essential benefit to students if lecturers on Chemistry would carefully explain and demonstrate to students the nature of "Faradisation," and show them a few animals resuscitated by it. Other forms of common electricity seem to do mischief in these cases, especially if applied to the par vagum, the current goes back to the origin of the nerve in the brain; but the "Faradisation" mode acts beneficially on the peripheral parts of the phrenic especially, waking up the dormant respiratory action in the diaphragm in a way that nothing else will.

Doctors' Surgeries.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It would be a very good thing if there was a person regularly appointed by law to inspect Druggists' shops and Doctors' surgeries. When I served my apprenticeship every poisonous drug was kept in a separate part of the surgery, and I was instructed to return every bottle to its place with such precision as to know the spot each one occupied in the dark. No illegible label was allowed, and if by long fingering any was indistinct, it was my duty to replace it. This being what I was accustomed to, fancy my dismaywhen—many years after, having to take the practice of a country Medical friend, I found few things labelled and still fewer labelled right. I had to travel five miles ere I reached his locale, there had to go the rounds for him, and when I got back to his surgery I had to search over it for everything I wanted, identifying each drug by taste, smell, or general appearance; after dispensing I had to return to town again. This lasted for upwards of a fortnight, and you may fancy I got pretty well tired of my work. Towards the end, indeed, I thought the safest plan was to use nothing but rhubarb, magnesia, quinine, and laudanum; for about those there could be no mistake, with peppermint water occasionally to vary the physic's taste.

Thus, then, you will see that the experience of "Country Practitioner" in your last number is not peculiar to himself,—would that it was more rare. I am, &c. Town Doctor.

Does Iodide of Potassium Remove Mercury from the System?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In a Catechism of the Medicine and Surgery of the Eye and Ear, written by Mr. T. Wharton Jones, I find the following question and answer at page 22, under the head of Iritis:—

Q. "The lymph which may have been exuded being, by the action of the mercury on the system, in process of absorption, would there be any objection to giving iodide of potassium to promote absorption, instead of a further use of the mercury?

A. "A great objection; because the effect of the iodide is to remove the mercury from the system, and thus allow the exuded lymph to become consolidated and fixed," etc.

Will you, therefore, kindly inform me whether this is the generally-received opinion of the Profession as to the effect of iodide of potassium on mercury. Being a junior member of the Profession, I am induced to ask this question from having had many cases, during the time I have been in practice, in which the combined use of mercury and iodide of potassium has been attended with beneficial effects. I may especially mention several cases of impairment of sight depending on a syphilitic taint in the system, in which the administration of small doses of mercury with iodide of potassium has proved very successful.

If this statement of Mr. Jones is correct, myself and many others must have been (to use a homely phrase) blowing hot and cold at the same time. But what I should like to ask is, If the effect of iodide of potassium is to remove mercury from the system, how is it that in those cases in which both are given at the same time, you get the specific effect of the mercury, —a fact which anyone may test for himself?

The subject is a practical one, and I should be glad to hear the opinion of others on this point. I am, &c. M. D.

Lead-Poisoning by Snuff.

The following letter has been forwarded to us by Dr. Cregeen:—

"Merrion-square, Dublin.

"Dear Sir,—I have read your interesting case of lead-poisoning by snuff in the last number of the *Medical Times and Gazette*, and as you wish for the communication of similar cases I beg to refer you to the 'Archiv für Pathologische Anatomie und Physiologie und für Klinische Medicin,' where you will find cases reported of partial paralysis caused by the continued use of snuff containing lead. The title is 'Ueber partielle Lähmungen der extremitäten durch fortgesetzten Gebrauch von bleihaltigem Schnupftaback,' von Dr. Moritz Meyer in Berlin. The first case I believe ever published was by Dr. Meyer in the year 1854, in the *Medicinische Central Zeitung*.

I translated Dr. Meyer's cases, and published a *résumé* of them in the *Dublin Hospital Gazette*, July 15, 1857. I am, &c.

"To J. J. Cregeen, Esq., M.D." "J. T. Banks.

Sewage as Manure.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The practice of irrigating our fields with the sewage-water of our towns, so glowingly described by Mr. Mechi, in a letter quoted in your Journal of October 26, must surely be fraught with danger to the health of the community. Of what avail is it that we carefully trap our water-closets, sinks, and drains, if, so soon as we have collected together all our sewage, the unutterable filth of millions of people, we are to spread it abroad over the face of the country, that its gases may become thoroughly mixed with the air we breathe? But it is said the earth absorbs this sewage, and so no doubt it does in part, and after a certain time; but what becomes of the gaseous portion in which the subtle poisons of fever and pestilence are suspended? Mr. Mechi, when he names Croydon, recals to his readers the dreadful fever which, a few years ago, desolated that town, and which has commonly been attributed to the escape of sewage gases. Are all our towns to share the fate of Croydon, and to be perennially surrounded with an atmosphere laden with the effluvia of contagious diseases?

Mr. Mechi says it is "refreshing" to think of 300 acres of land close to Croydon being inundated with the liquid sewage of 25,000 people. I confess the thought is to me anything but refreshing, and so I fancy it will prove to the inhabitants of the town, whenever they pass near the site of this agricultural experiment.

Now that we are incurring the enormous expense of the Main Drainage System, let us at least have the satisfaction of feeling that the abominations we have removed from our dwellings are not, in an insidious manner, to visit us again. I am, &c. Naso.

Are very Contracted Pupils an Infallible Sign of Opiate Poisoning?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—A friend of mine was called last Sunday evening to see a middle-aged man, who was supposed to be in a fit. The history was that he had complained of diarrhœa for the last two days, but had not been from home since the previous (Saturday) evening. He went to bed about six o'clock on Sunday, after having partaken of tea; and his wife on going to him two or three hours afterwards, found him in a state of insensibility. The pupils were contracted so as to be scarcely visible; the coma was profound, so much so that he could not be aroused by any means used; he was, in fact, totally insensible, and could not be made to swallow; yet he survived until nine o'clock the next (Monday) morning.

The autopsy revealed nothing special, excepting great congestion of the brain. No analysis was made of the contents of the stomach, as there was no suspicion resting upon any person; so that if death was caused by narcotism he probably died by his own act. But no bottle or any other evidence could be found to confirm this suspicion.

Under these circumstances it was supposed that an order would be made for an analysis. None, however, was made, but an open verdict returned —"Died from congestion of the brain, cause unknown."

Now, what I wish your numerous contributors to inform me is, whether death in this case could possibly arise from "natural causes" or must we attribute it to opiate poisoning? An answer will greatly oblige.

I am, &c. J. J. C.

Maternal Influences as Causes of Independent Diseases or Other Lusus Naturæ of the Fœtus in Utero.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have been much interested in the letters of Mr. Cooke in your number of October 19, and of Mr. Jennett in that of the following week, touching the diseases occurring to the fœtus in utero without the mother being so affected. I might thank the former gentleman for reminding me of the writer upon this subject whose work I had carefully perused some twenty-five years ago, when more fond of reading and but a tyro in physic; never having looked at the book since, I had forgotten the author of such record. I now refer to it and find it published just ninety-nine years ago.

Within the last three weeks a case has occurred in my own practice very similar to one described by Mead of "a certain woman who had formerly had the small-pox, and was now near her reckoning attending her husband in the distemper," the only difference being that the woman in the case I am about to record had been vaccinated, but had been very anxious about her mother-in-law, living almost next door to her, who had small-pox very mildly the latter end of April last, the small-pox being rather rife in the village during the spring and summer now past.

This parturient woman was very nervous about it, but never herself complained in the least. On Oct. 21 she was delivered of a fine child (about six weeks before her time), though with vital powers so feeble as to induce the use of warm bath, which had the effect of revivifying it sufficiently long to have it dressed and named—about eight hours. The face, limbs, body, indeed every part was studded with well-developed variolous pustules. I have hitherto been very sceptical about "maternal influences," but this, with a former case of a totally different character, has tended much to make me think again on the subject.

If I be not encroaching too much on your space, I will briefly give this case. In the middle of August last I attended a lady with a fine child (a girl) having a remarkable sort of "thrombus," or nævus, in the hand. It presents the appearance of a small ball in the palm of the hand, but seemingly wholly unconnected with the palmar fascia or tendons of the fore and middle fingers, though when the fingers are flexed, as in grasping, the enlargement shows between these two, and appears exactly as if it were grasping a ball in the effort of catching. The appearance of the growth is variable, *i.e.*, sometimes small as if of encysted or cartilaginous substance and pale, and at others as if turgid with blood, the average size being about that of half a walnut shell. How far, therefore, are these the result of maternal influences? When the mother in this latter case, of her own accord, attempts to explain it as arising from her catching a ball repeatedly at a game of "cateh-ball" with the village children at one of the school treats (so much in vogue in the present day) when she was about half her term in pregnancy. She says the ball was often thrown into her hand with smartness so as even to sting her, and says "So that's the only way I can account for it." I am, &c.

East Rudham, November 6. Fred. Manby.

Jaundice in the Infant.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Considerable doubt being entertained as to the probability of the occurrence of true jaundice in the infant, I beg to inform you that a well-marked case has, during the present month, fallen under my notice. My patient, a strong male infant, on the fifth day after birth presented yellowness of the skin and conjunctivæ. On the sixth day this yellowness became more distinct, and the urine was found to stain linen of a yellow colour. These symptoms gradually increased in intensity until the ninth day when the child died.

Dr. Watson, one of our greatest authorities on the practice of Medicine, remarks that—"true jaundice may, as well as most other complaints, befal the earliest periods of life;" but that he considers it seldom does.

I am, &c.

Ebenezer Hughes,
Lic. Fac. Phys. and Surg., Glasg.

25, Smith-street, Kirkdale, Liverpool.

COMMUNICATIONS have been received from:—

Dr. Chambers; Dr. Marcet; Professor Laycock; Mr. W. Adams; Messrs. Savory and Moore; Registrar-General; Dr. Weber; Mr. Ellis; Dr. Althaus; Dr. Gray, Oxford; Mr. Lane; Dr. Hillier; Mr. P. Le Neve Foster; Council of Zoological Society; Mr. Cullen; Mr. Baldock; Mr. Dixon; Dr. Kidd; Dr. Cregeen; Dr. Hughes; Mr. Manby; Town Doctor; Naso, &c.

APPOINTMENTS FOR THE WEEK.

November 16. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Metropolitan Association of Medical Officers of Health, 7½ p.m. Mr. Phipson "On Dr. Van Hecke's System of Warming and Ventilation."

18. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Medical Society of London, 8½ p.m. F. W. Mackenzie, M.D., "On the Pathology and Treatment of Phlegmasia Dolens."

19. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Pathological Society, 8 p.m. Council Meeting.

Ethnological Society, 8 p.m. Dr. James Hunt, Hon. Sec., "Report of the Ethnological Papers read at the British Association at Manchester." John Crawfurd, Esq., President, "On the Connexion between Ethnology and Physical Geography."

20. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Society of Arts, 8 p.m. Meeting.

21. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

Harvfian Society of London, 8 p.m. Mr. Ballard "On the Convulsive Affections of Children."

22. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Hospital for Paralysis and Epilepsy, 4 p.m. Dr. Ramskill "On the Action of Remedies for Epilepsy and Paralysis."

Messrs. Savory and Moore beg to

invite the attention of the Medical Profession to two SOLUBLE EFFERVESCING COMPOUNDS of QUININE which they have just succeeded in producing in the elegant and convenient form of Granular Powders, viz.—

GRANULATED EFFERVESCING CITRATE of QUININE.

GRANULATED EFFERVESCING CITRATE of IRON and QUININE.

Dissolved in water or wine these Salts make a perfectly clear sparkling solution, which, in the state of effervescence, is more palatable than ordinary quinine or iron solutions. Both preparations will remain permanent even in the hottest climates.

The following REMEDIES and AUXILIARIES in MEDICINE and SURGERY, also introduced by Savory and Moore, are generally approved by the Profession:—

THE HYPOPHOSPHITE of QUININE, of IRON, and of QUININE and IRON, in scales.

SYRUP of HYPOPHOSPHITE of QUININE, of IRON, and of QUININE and IRON.

CONCENTRATED ESSENCE of SUMBUL, for Nervous Disorders, Epilepsy, Spasms, Cramp, &c., &c.

AERATED PROTOCARBONATE of IRON WATER.

"Its combination appears to me to be perfect, and it is a good substitute for the natural carbonated chalybeate."—Professor Letheby.

COD-LIVER OIL with QUININE, COD-LIVER OIL with IODIDE of IRON, and other genuine Medicated Cod-Liver Oils.

DATURA TATULA for ASTHMA, prepared in the most convenient forms for general use,

THE EYE DOUCHE, or FOUNTAIN, for applying cold water or Lotions to the Eyes.

"The principle and application of which are highly approved."—The Lancet.

"We have tried one of these Douches, and can express our approval of it."—Medical Times and Gazette.

THE EAR DOUCHE: an efficient substitute for ordinary Syringes.

"They are most useful instruments."—Medical Times and Gazette.

"We are much pleased with the ingenuity of this admirable contrivance."—The Chemist and Druggist.

N.B.—Imitations of the above Eye Douche being defective in several essential particulars, instead of producing the beneficial effects, cause irritation and congestion, rendering it important to observe that the words "Savory and Moore, London," are conspicuous on every genuine Douche.

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SYR. QUINÆ FERRIQUE SUPERPHOSPH.
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SYR. QUINÆ FERRIQUE SUPERPHOS. CUM STRYCHNIA PHOSPH.
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And all other Syrups of the Pyrophosphates, Biphosphates, &c. &c.
LIQUOR SUMBULI.
TINCT. ACTEÆ RACEMOSÆ.
MAGNESIÆ CITRATIS (Effervescing).
CADMII IODID.
CERII OXALAT.
Also their
LIQUOR SECALI CORNUTI.
(Recognised Preparation.)

Exhibited at the "Obstetrical Society of London," by the President, June 1st, 1859 (vide the "Lancet," June 11th, 1859).

"University College Hospital, Oct. 28th, 1858.

"I have much pleasure in stating, that after numerous trials under Dr. Murphy's direction, I have found the Liquor Secalis, as prepared by Mr. Curtis, to *far exceed* all other preparations of the kind.—HENRY HEMSTED, M.R.C.S.

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Orders received at the Manufactory and Laboratory (which is open for the inspection of any Medical gentleman who may honour Messrs. Curtis and Co. with a visit).

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Messrs. Rew and Co. solicit the

attention of the Profession to the following approved Preparations:—

OIL of HORSE CHESTNUTS, applied externally for Gout, Rheumatism, Neuralgia, &c. To prevent disappointment it is necessary to observe that each bottle bears our name and address.

HORSE CHESTNUT POMADE, a most effective application for Hæmorrhoides.

LIQUOR CASTANEA EQUINA.—Two or three doses will often arrest the most acute paroxysms of Gout, and is of great service in Chronic Rheumatism.

LIQUOR ACTEA RACEMOSA (Baneberry), in doses of forty to sixty drops, for Acute and Chronic Rheumatism.

CARBONATE of LITHIA, and OXALATE of CERIUM, at prices according to quantity.

IODIDE of LITHIA (originated by REW and CO.) has been of great service in some most intractable cases of Gout and Rheumatism.

REW and CO.'S LITHIA WATERS consist of four kinds, viz.—Lithia, Iodide of Lithia, Lithia with Potash, Lithia with Ammonia. These are guaranteed to contain a proper proportion of Lithia, and are in every way very superior to the ordinary Lithia Waters of commerce.

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profession of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Physician to the Hardwicke Fever Hospital, Dublin, and Physician-General to His late Majesty's Forces in Ireland, &c. &c., contained in the "*Dublin Hospital Reports*," *vol.* 1, *p.* 317.

"Since this case came into my possession, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in sometimes removing the APOPLECTIC DIATHESIS in "persons advanced in life. It is, moreover, worthy of observation, "that JAMES'S POWDER has been of remarkable utility in "certain instances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effusion. Lastly, in two cases of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect success."

Also *vol.* 1, *p.* 320.

"The following very simple method of exhibiting JAMES'S "POWDER, in cases of undue determination of blood to the "head, is that which I have generally pursued. The patient is "made to begin with a very moderate dose, not more than two "grains at bedtime, and to increase the dose by half-a-grain every "night, until some sensible effect is produced upon the stomach, "bowels, or skin. Should the stomach be affected with sickness, "the dose must be lessened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be administered than the stomach could "otherwise bear. If the skin is softened, or the bowels affected, "the dose should not further be increased, but it must be repeated "every night for a considerable length of time: in several instances "I have known eighteen or twenty grains taken for a considerable "period without any inconvenience."

The following extract (showing the increasing estimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumleian Lectures," 1858-59, delivered before the Royal College of Physicians, by A. Tweedie, M.D., Physician to the London Fever Hospital, who is admittedly one of the highest practical authorities on the subject of Fever. He says, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be such as to require antimonial prepa-"rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery) should be taken at intervals according to circumstances."

In writing to Messrs. Newbery, he says:—

"I wish that your preparation was always used."

To secure the dispensing of the *original* preparation, which, for 114 years, has been sold by the house of Newbery and Sons, in St. Paul's Churchyard, it is necessary to prescribe it as "PULVIS JACOBI VER., NEWBERY'S," otherwise another article (wanting in the best properties, and recommended to be given in a different code of dose, *though called by the same name*) may be substituted for the original medicine.

This substitution must bring disappointment, and of course deter Practitioners from prescribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

FRANCIS NEWBERY AND SONS.

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Prices for Dispensing ¼ oz. Bottle, 3*s.* 4*d.*; 1 oz. 9*s.*
Usual Discount to the Profession.

ORIGINAL LECTURES.

CLINICAL LECTURE ON THE RENEWAL OF LIFE IN CONTINUED FEVER.

DELIVERED AT

St. Mary's Hospital,

On October 18, 1861.

By THOS. K. CHAMBERS, M.D.,

Fellow and Censor of the College of Physicians; Lecturer on Medicine at St. Mary's School; and Physician to the Hospital.

Gentlemen,—You saw a case of Continued Fever admitted into Albert Ward four days ago, which presents a good many points valuable for instruction.

Charles P., aged 15, a shop-messenger, who has grown rapidly lately, and has been worked perhaps rather beyond his strength, stated on admission that he had felt ill, languid, and unequal to exertion for six weeks. During the past fortnight he had come home every evening entirely without appetite for his supper, and had sat cowering over the fire in a shiver. For three days he had had vomiting of all food taken, diarrhœa, and pain in the belly. Cough also had come on with pain in the right side during respiration. He had expectorated transparent mucus with sooty specks in it.

On examination there were found on the surface of the abdomen and chest upwards of a dozen dingy fever-spots in several stages, some entirely disappearing on pressure, some not. There was no pain or gurgling on pressure of the bowels, and the diarrhœa was stated to have ceased. There was great muscular languor and inability to stand, and a very weary, dull look in the eyes. The right cheek was flushed. The lower part of the right lung was dull on percussion, and there were moist cracklings in it not very fine, and dry whistling râles scattered about the rest of the lungs. The tongue was thickly coated with yellow; the skin was hot and dry; the pulse 104, small and sharp. The urine was high-coloured, and deposited a copious yellow sediment, soluble by heat. The quantity passed during the next twenty-four hours was fifteen ounces of the specific gravity 1·020.

The boy's mother stated that they lived in a healthy attic, dry and free from foul odours, and could in no wise account for the illness.

This is a sporadic case of the ordinary Continued Fever, common during the autumn in this metropolis, complicated by an intercurrent pneumonia. It has presented all the most important symptoms without the patient being so ill as to be unable to tell his story, or to make the repetition of it, and the examination of pupils dangerous to him. I will call your attention to what you may learn from it.

There is every reason to believe that the exciting cause of these fevers is a poison generated by decomposing organic matter and received into the body from without. It appears to be widely diffused through the air, especially in the neighbourhood of its origin in the air of sewers, putrid marshes, and crowded human habitations. If you are readers of popular sanitary literature you are probably satiated with the accumulated and *decies repetita* evidence of this fact. You are inclined to ask how it is, if the poison is spread so broadcast, that every body does not get poisoned. You will wonder why it should get into the body of this boy, whilst you, really much more exposed to it, escape. But remember there are two things necessary to poisoning, not only the poison, but a person liable to be affected by it. And, in point of fact, the latter is the most important element in the transaction. It is only on a predisposed body that a morbid poison acts. It is most likely that we are all constantly taking in minute doses of typh (the exciting cause of these continued fevers), and that we can digest, oxidize it, or otherwise render it innocuous under ordinary circumstances. But should some epidemic influence or exceptional deficiency of vitality deprive us of the powers of doing so, then we suffer the effects and have typhus fever or typhoid fever, as the case may be. There was sufficient reason for this boy being the victim while others escaped shown in his recent rapid growth and in his strength being overtasked by his work. The exhaustion of vitality allowed the poison to do its work.

Observe how slowly the poison acts in some cases. Our patient is upwards of five weeks ailing before any of the distinctive features of his fever show themselves, and then they appear one by one. The time is not usually so long, especially during epidemics, but you may detect it in the history of almost every case. And you ought to notice it, because from some systematic works you might be led to suppose that a continued fever was easily to be measured by days and hours from the exact minute of invasion. This is impossible in practice, and would be of little use were it possible.

I am inclined to think that the usual path by which the poison enters is the digestive canal. It is mixed with the saliva and carried down to the stomach, where it possibly may accumulate and be multiplied in the gastric mucus. During severe epidemics it has been observed that those who smoke, that is stop up their mouths with tobacco, and spit out the saliva instead of swallowing it, are less liable to be attacked. And in an early stage, even after the poison has begun to act upon the system, the fever may be arrested by emptying the stomach; and thus apparently preventing the whole dose being taken up. Those who have watched my practice will have seen several instances of the success of this treatment, the fever cut short and convalescence entered upon immediately with its painless debility and emaciation gradually passing away.

One case last autumn gave me the opportunity of recording that the influence of the remedy is not merely apparent or accidental, but that it really removes an essential part of the disease. W. S., a robust lad, aged 15, came into the Hospital September 5, 1861, with hot skin, rigors, excessive muscular languor, pain in the back, limb, and head of four days' duration, gurgling in the right iliac fossa and rose spots. For the first twenty-four hours he had no medicine, and the urine was kept and analysed. The result exhibited the following quantities of its various constituents daily excreted:—

Date.	Quantity in cubic centimètres.	Specific gravity.	Urea (grammes).	Uric acid.	Chloride of sodium.	Sulphuric acid.	Phosphoric acid.
September 6, 1860.....	1000	1027	50·63	·43	·25	3·48	3·24

Then an emetic was administered, and coincident with an universal remission of all the symptoms, the urine exhibited the following remarkable change in the amount passed during the next five periods of twenty-four hours:—

Date.	Quantity in cubic centimètres.	Specific gravity.	Urea (grammes).	Uric acid.	Chloride of sodium.	Sulphuric acid.	Phosphoric acid.
September 7....	530	1028	29·37	a trace	0·79	1·97	1·14
September 8 and 9; mean of two days, urine mixed	770	1016	14·79	0·037	2·68	1·008	0·72
September 10 ..	1200	1011	18·42	0·090	4·20	1·34	0·32
September 11 ..	1320	1006	16·71	a trace	4·62	0·96	0·71

Now, the contrast between these specimens of urine is exactly that which is found between the urine during fever and the urine during convalescence. In the first there is evidence of destructive metamorphosis going on with extreme rapidity; in the latter the destruction is overcome by renewal. And this change into convalescence was most strikingly marked as due to the operation of the emetic. When we see so often the immediate consequence of one dose of so simple a remedy, it is difficult to avoid the conclusion that its benefit is purely mechanical, and that it acts by removing from the mucous membrane of the stomach a poison only partially absorbed and still adherent to it. Another reason for suspecting that the gastric mucous membrane is an early if not a primary recipient of the poison, is that it early exhibits such special phenomena as usually accompany the ingestion of an unwholesome material. Spontaneous vomiting is very generally found in the first stage of fever (as you have observed in the patient under consideration) and seems to offer a presumption that the part which is then most feeling

the effects of the poison is that organ which most resents it—the gastric mucous membrane. Such is the evidence by which I have been led to believe that the exciting cause of continued fever enters usually by the digestive canal—*valeat quantum.*

When the poison has once gained admission and is diffused by means of the circulation through the system, its effect is to destroy the vitality of a considerable amount of the organic living matter with which it comes in contact. The destruction is interstitial, not local—I mean, it does not kill absolutely a certain spot which it touches, like sulphuric acid, but it kills only certain constituents of the tissues. The destruction is partial, not entire—the organic matter is not utterly disorganised, but only reduced to a less vital, less organic condition. It may be traced easiest in the alterations found in the medium by which it is diffused. The blood, the common thoroughfare for distribution of good and evil to the tissues, exhibits a serious change. If you examine it under the microscope you will find that the normally shaped red discs are diminished in numbers as compared with what Pathologists call "melanosed" corpuscles, that is to say, dying or dead discs, shrivelled and small, of a dark colour, with black specks in them, and with gimped edges. In bad cases these are unable to range themselves in rolls, as healthy blood does when it coagulates; they seem to have scarce any attraction for one another and lie in amorphous heaps. They dissolve easily in the serum and form with it a red fluid. You may trace this dissolution in the dusky stain which the blood communicates to the skin in low fever.

This poisoning goes on very gradually in some cases, and apparently quicker in others. You heard from this boy that he was five weeks ailing before he gave up work. There was an imperfect renewal of the body, evidenced in the languor after exertion and in the loss of appetite or deficient demand for new material by the formative processes. But destructive assimilation is not arrested, there is no stop to the removal of the effete tissues by excretion. I think it is possible that in a great many cases the disease, the partial death, may stop here, the destroyed tissues and their destroyer together be disorganised, be reduced to their elements and pass away. The idea is incapable of proof, but it would account for a vast number of those mysterious languors, unclassified, unnamed, and often unpitied, which distress patients and puzzle Doctors. However, when the poisoning has reached a certain pitch, the nervous system cannot but take notice thereof, and express itself in the most common mode of taking notice of partial death, namely, by a shivering fit. Any severe injury to the body, a stretching of fibrous tissues, an operation, the fear of an operation, the absorption of destructive drugs, such as antimony, for example, will cause more or less of a rigor in proportion to the sensitiveness of the individual. And thus also when an interstitial death of some constituents of the body arrives at a certain point, there is a rigor. This rigor recurs from time to time at uncertain intervals, but generally about once a-day.

Then commences another symptom of partial death—pain. This boy described his head, his limbs, and his back as aching all at once. That is to say, wherever there was most tissue with sensitive nerves in it, there was pain, indicating the diseased state of that tissue. Now all this aching is a symptom of the earlier, rather than of the more advanced stages of fever; not because there is latterly less death, but because the nervous system becomes partially dead too, and does not feel so acutely.

Observe that this patient tells us of nausea and loss of appetite, which diminished the food eaten—of vomiting, which rejected the greater part of that diminished food,—and of diarrhœa, which carried off the remainder scarce digested at all. Yet in spite of this, the amount of solid matter passed from the kidneys is considerable; the specific gravity of the fifteen ounces of urine passed in the twenty-four hours is 1020. The metamorphosis, therefore, of the dead effete tissues into urea and salts is quite as active as in health There is a continuous destruction of them in spite of the defective supply. This goes on as long as the fever poison lasts in the body, but when it is got rid of, the destruction ceases, no more is metamorphosed than is required to make room for new material, and the specific gravity of the urine falls during convalescence. This may take place very suddenly, as in the instance I gave you of a fever cut short by an emetic; but in general the alteration is more gradual.

I have mentioned the large amount of urea in proportion to the nutrition in the urine of continued fever, which is rendered evident by its high specific gravity. There is also an increase very evident to the naked eye in another constituent of some importance, the coloured organic material, which gives the secretion its ordinary hue. You saw how dark this boy's water was, and how deeply it stained the vessel from which I poured it on a piece of white linen. There is great reason to suppose there is a close alliance between this substance and whatever gives the red tint to the blood-discs, and that its excess depends on excessive destruction of those important little living particles.

The sulphuric acid and phosphoric acid, combined with bases, which form a necessary part of urine, do not, in continued fever, follow the lead of the urea; their amount is less than in health. Whether this is due to the destructive metamorphosis taking less effect on the chief tissues containing sulphur and phosphorus, than it does on the blood and muscles, is uncertain. Dr. Parkes suggests that perhaps a third of the normal sulphates and phosphates of the urine are derived directly from the food, and not from the metamorphosis of tissue; and therefore that their diminution in continued fever may be owing to the starvation, while the amount which still remains represents a fair proportion of destruction (a).

The chlorine, in the shape of chloride of sodium, is also in small quantity, but not so deficient as to lead us to suppose that the metamorphosis of the chlorinated materials of the body does not go on, or that there is retention of it in the fluids. The great quantity of chloride of sodium taken as food, and directly mixing with all the fluids, again introduces a difficulty of observation. And another is offered by the frequency of intercurrent pneumonia, which itself causes a retention from the kidneys of chlorides. This patient, for example, has a little pneumonia, and we could not, therefore, say if absence of chlorides in his case were due to that inflammation or to typhoid fever. Other frequent impediments to knowledge are diarrhœa or colliquative sweats.

The diarrhœa so frequently accompanying low continued fever is a further evidence of death in the blood. Let the fluid fever stools be set to stand in a tall glass, and you will see them separate into two parts; the highest a semi-transparent serum, in which float epithelium scales and crystals of ammonio-magnesian phosphate; the lowest stratum a greenish-black flocculent precipitate. This last has no smell of bile, nor is bile to be discovered in it by chemical tests; but it contains broken-up blood-discs and a great quantity of dark, granular colouring matter—it is just like blood, altered by the secretions of the bowels. And very often, when you let the stools separate in this way, and look at them by transmitted light, you will see a visible sanguineous tinge in them: very often blood mixed with mucus is passed from the bowels. Blood, too, is not infrequently spit up with the mucus from the lungs, and drips from the nose; and in bad cases the dried up mucous membrane of the mouth cracks, and exudes the sanguineous serum on the surface of the tongue, producing the "dry, brown tongue" of severe fever. All these prominent symptoms call your attention to the interstitial death, the lessened life of the body.

The increased heat in fever is to the superficial observer rather adverse to the doctrine which I have advanced, of all disease being an evidence of diminished vitality. And, in truth, it requires some thought to see why it is not really so. But a complete answer to the idea of an augmentation of heat being necessarily an augmentation of life, is afforded by the fact of many recorded instances of the increase of corporeal warmth having taken place in corpses actually after death: so that, discarding at once the notion of its being a proof of vitality, we may try and trace what causes really rather to be associated with death may give rise to it in the cases under our eye. In the first place, in fever you have a diminution of the evaporation which takes place from a healthy skin, and which acts as such a powerful refrigerator, as any physiologist who has perspired knows full well. The dormant dry skin does not do its cooling office. Then, in the second place, there is a much larger quantity of dead matter to be evacuated, and the destructive metamorphosis of this, the semi-vital chemical destruction, raises the temperature, as all chemical solutions do. Wherever metamorphosis is

(a) Parkes "On the Urine," B. II., chap. iii., sect. 4.

rapid, the temperature is raised. But this metamorphosis alone, this passage of living into inorganic matter, cannot be called an increase of life, inasmuch as it indicates an advance of death. It is necessary indeed to the removal from the body of poisoned ingredients, and is so far an advantage, but still it is an indication of the quantity that is poisoned.

Cooling affusion is sometimes spoken of, both by opponents and advocates, as "checking" or "arresting" the febrile heat. This is apt to give you a wrong notion. If it really arrested the metamorphosis which is the cause of that heat, it would be obnoxious to all that could be said against it. But, in fact, it no more "arrests" or "checks" the heat than emptying the bladder "arrests" the secretion of urine. A moment's thought will show you that what it does is to *remove* the heat from the external surface, and if it affects the cause of heat at all, it would rather encourage it by making room for more.

Such are some of the most prominent consequences of the typh poison in the human body.

You may remember that, in the first Lecture, I warned you against the Evacuator's or Humoral Pathologist's doctrine of a *materies morbi*, which he looks upon as *the* disease, and which he thinks he has done his duty by endeavouring to eliminate. "Surely," you will say, "this which you have been describing is a most typical *materies morbi;* if I eliminate this, I cure the disease." Not so fast—the bullet which enters the soldier's ribs is a *materies morbi*,—have you cured the disease when you have extracted it? Nay, more—suppose the bullet passed right through the chest and went out on the other side, would you consider the disease gone? No, the typh poison is not the disease, any more than a bullet, or sulphuric acid, or opium is a disease, though all may be a material cause of disease. The partial death which these agents cause is the disease—is that which requires to be treated, and must be the chief point for the Physician's consideration.

Here, then, we bring our doctrine of Restorative Medicine to its touchstone—bedside application. The Restoratist asks himself, What vitality is wanting, and where? What material is wanting, and where? And, How shall I easiest supply them?

In the first place, if he sees the case early, almost the only thing he notices is the lowered vitality of the stomach—how badly it digests its food, and how it loathes its usual work. He conjectures that its function is arrested by the presence of some poison, and he empties it with an emetic. In many cases, early in the disease, this cuts it short at once, as I told you in a former part of the Lecture, and as you have many opportunities of observing in the wards.

Secondly, supposing he is too late for this *coup de main*, he remarks that the skin is hot and dry, in a great measure from deficient perspiration and evaporation on the surface of the body. He undertakes to supply this want by an artificial moisture. He spunges the whole person over three or four times a-day with tepid water, to which the nurses here generally add some distilled vinegar to make it more agreeable. The relief given is most sensible and immediate; but of course it soon passes away, as changes of temperature are in their very nature temporary. It must therefore be frequently repeated.

I confess I am somewhat cautious about the employment of aqueous affusion where there is pneumonia in fever. It sometimes chills the chest and causes an attack of pleurisy on the inflamed side. Besides which it interferes with a plan I have of keeping a large poultice outside the affected part, and which I find so beneficial in pneumonia that I do not like to omit it. For this reason it was not done in the case of the present patient.

Thirdly, he sees that a large supply of nitrogenous material must be wanting. The nitrogenous tissues are devitalized, are running away in an enormous excretion of urea and other organic compounds, and nothing is taking their place. Shall he act allopathically, and give some drug whose tendency is to stop the passage of urea by the kidneys? I do not know exactly how he would set about it; but I know that if he succeeded, he would do an infinity of harm; for the very worst cases of fever are those in which metamorphosis is active, (as shown by the heat) while the excretion of urea is arrested (as shown by the lightness of the urine); they resemble cases of urea poisoning from diseased kidneys. The other principles of treatment which I noticed in my Introductory Discourse (b) would not perhaps be so directly injurious, but common sense would still assign the palm to Restoration here. Let it be your chief aim to supply that which you so clearly see is passing away—nitrogenous food.

But how will you supply it? Solid meat would in all probability be vomited from the intolerable loathing it excites. If not vomited, it would lie for some time a mere foreign matter outside the mucous membrane of the digestive canal, and then pass away by diarrhœa with much flatus and fetor and much disengagement of gas during putrefaction. Your beef-steak might as well have been originally thrown down its final destination, the water-closet; to which it passes putrid though undigested. Neither is it wise to fill the stomach with large quantities of victuals, for the same result follows. No "meals" must, therefore, be taken. The prudent plan is to give very small doses of liquid nitrogenous aliment very frequently. These pass over the irritated stomach as if on the sly, and are taken up gradually by the intestines, requiring but very little digesting to make them fit for absorption. The best adapted food is that which is naturally supplied to the weakest stomach. The feeble digestive organs of babies can assimilate milk, and milk forms the most appropriate nourishment for the debilitated viscera of the fever patient. By giving two or three ounces every hour you may get down about a quart and a-half per diem. But in ordinary instances every two hours is often enough, and that period is adopted for the boy before us. If there is sufficient acid left in the stomach to coagulate the casein into clots, and cheesy lumps are rejected by vomiting, as happens sometimes in milder cases, you may guard against this by adding liquor calcis, or soda-water to the milk, or you may supply its place by beef-tea. But it is the lumping of the cheese into solid masses that it is desirable to avoid, not the acidification, which is beneficial. If the patient takes thus a good supply of milk and beef-tea, not only is the immediate danger of death by starvation avoided, but the emaciation which follows during convalescence is much less extreme, and the dangers in its wake less formidable.

Eggs are a highly nutritious food; and, if taken raw, diluted with milk or water, they are quickly absorbed. But should they be delayed and putrify, the products of their decomposition are peculiarly injurious: the sulphuretted hydrogen and ammonia evolved are poisons to the intestines. I should recommend you to avoid them till convalescence has restored the gastric powers. The same objection does not lie against milk, the lactic acid arising from whose decomposition assists in the solution of the casein. Sour buttermilk is by no means to be despised as a food.

Fourthly. The Restoratist turns his attention to the Materia Medica, and considers what he can cull from thence which will be of service.

You have been taught in the systematic course on Medical Pathology, that ammonia, which is always being formed and given off from the animal body, is found much more abundant in certain conditions than in others, and that these conditions are those in which nutritive metamorphosis or growth was deficient as compared with destructive metamorphosis, or those in which there is retention in the blood of the products of that destructive metamorphosis. Thus, more ammonia is found in the breath after exertion than after rest; more than usual in those who injure their digestion by smoking tobacco; a great deal in uræmia, where the urea cannot escape by the kidneys; but above all, in continued low fever is this exhalation of decay noticeable, as you will find in Dr. Richardson's valuable work on the "Coagulation of the Blood," (c) where the phrase "super-alkalinity of the blood" is applied to this condition. Dr. Richardson goes so far as to attribute to this super-alkalinity the special typhoid symptoms, and to suggest that the absorption of ammonia in excess may intensify fever in those who contract it from exposure to decaying organic matter, or human exhalations. He supports his hypothesis on the experiment of inducing the symptoms, or something resembling them, by the injection of ammonia into the veins of an animal. The word "super-alkalinity" is expressive, and quite unobjectionable, so long as it is understood that the superabundance is not absolute, but comparative. For it is not shown that there is more alkali in the body than there ought

(b) See *Medical Times and Gazette*, November 2, 1861, p. 449.

(c) Richardson on the "Cause of the Coagulation of the Blood." Appendix I. (Edit. 1858).

to be, but more than there is acid to neutralize. "Sub-acidity" would be a synonymous term, and, perhaps, would be more suggestive of the means we have at our disposal for remedying the defect.

Very difficult indeed would it be for the Eliminator to get this alkali out, but it is easy for the Restoratist to get acid in. The acid I have always given is hydrochloric, and you consequently see on this lad's card—"℞ Acidi hydrochlorici diluti ♏xx., syrupi ʒj., aquæ ad ℥j., alternâ quâque horâ sumat."

Rich patients like a little more sugar, and the draught is usually approved of even for its taste. But it is still more approved of for its beneficial effects. This boy said to-day of his own accord he hoped I should continue the draughts, they made him "feel so much stronger," meaning to express the sensation of relief to the depressing wearying languor of fever. In mild cases the tongue begins to clean immediately, the thirst and diarrhœa much abate, and the repugnance to food is diminished.

Whether other acids would do as well as the hydrochloric I cannot say, but it is so largely diffused through the body combined with alkali as a constituent of the tissues, that it appears peculiarly suited to the purpose. I have now used it in every case of low fever for four years, and have not lost one, except a woman who came in here with deep ulcers in the bowels, and was killed by perforation. In a clinical lecture at this Hospital in January, 1858 (d), I gave the details of the first dozen cases treated on this plan, and I must say that my confidence in it is by no means diminished.

As you are a different audience from that which heard me at that time, perhaps I may be allowed to quote in repetition my own words—"What blood, when analyzed, comes nearest in its altered proportions to the blood in low fever? Is it not that in scurvy and purpura? There is the same excess of blackened (melanosed) blood discs, the same deficiency of neutral salts and organizable (coagulable) lymph. Everybody treats these chronic affections with acids, and why not also an acute affection which corresponds with them in one point at any rate? As to the particular acid employed, muriatic certainly deserves to be tried before others—first, because it is such a large constituent of the body that it might almost be called a food instead of a medicine; and secondly, because it is such a powerful arrester of the decomposition of animal matters. Pour it into a sewer, and you destroy the miasma. May it not in the body stop that miasma from poisoning the tissues?"

The allusion in the last sentence is of course to chlorine as a disinfectant. But I do not know that there is any evidence of the benefit derived from the hydrochloric acid treatment being due to this property. About sixteen years ago, I employed chlorine water as a medicine in fever at the Chelsea Dispensary; but I was not encouraged to carry on the treatment by tracing any benefit to it. Whether the chlorine which can be introduced in this way is not sufficient in amount (for it must be dilute, or it induces so much choking) or whether it is really useless, I do not know; but I left it off for years, and adopted the muriatic acid from the description which Mr. Ash gave me of the advantageous use of it by Dr. Mackenzie.

As to the use of alcoholics in continued fever, I am guided almost entirely by the condition of the nervous system. If there is very complete prostration, delirium of a low muttering character, it is required. A tremulous state of the muscles, marked especially by a quivering of the hands and fingers, is a good test of the necessity for it; and so is a sharp, weak, unequal beat of the heart. All these indicate that the nervous system is feeling very sensitively the destructive metamorphosis going on, and has its power reduced by its sensitiveness. Then is the opportunity for the powerful anæsthetic alcohol, which in severe cases you see me order without scruple, but which I do not rank as part of the systematic *methodus medendi* of continued fever, and have not yet ordered for the lad we have been prescribing for. Above all, I would caution you against employing wine as a substitute for the true restorative treatment which I have been describing. It may be useful as an adjunct or to assist it, but never in its place.

There is, though, another of the adjunctive methods of treatment—exceptional, but often required—which has been employed with utility in this case—the local abstraction of blood. The boy had congestive pneumonia of the lower lobe of one lung, and I did not hesitate to cup him beneath the scapula on that side. And not unfrequently when there is pain in the right iliac fossa, with diarrhœa and tenesmus, I put leeches on the belly at the seat of pain. You saw the dulness on percussion rapidly pass away from the lower lobe in our patient here; and you will often see an equal relief to the abdominal congestion by a corresponding agency.

But you will cry out that I am sadly inconsistent. I am feeding up the patient with one hand and taking away his *pabulum vitæ* with another. The reproach is just in a sense, but that a very limited one; and, in fact, may be levelled against half the operations of daily life. We are constantly suffering a small loss for the sake of greater gain. And I think the loss of a little blood is insignificant compared with the advantage of securing a freer circulation through the lungs, a diminution of congestion in the intestinal canal. Do not be led away by the superficial notion that blood is blood, and blood is life. That is not true, for the blood varies immensely in its composition, some being very valuable, and other worthless. To lose some of the half dead circulating fluid of fever is but little loss, and that little loss is amply compensated for by the additional nutriment which a small blood-letting will enable to be absorbed. The deficiency is soon made up again under the restorative system.

In the sequelæ of low fever, more than any in other disease, the great difference between one patient and another as respects their power of recovery, lies in their stomach. There is a little girl of four years old, now in Victoria Ward, who was admitted, on the 2nd of September, for rose-spotted fever, which had come out during the concluding week of August. She got through the fever pretty favourably, but for the last seven weeks has had a succession of most formidable abscesses in the back, the cervical glands, the internal ears, and the parotid glands; yet, in spite of the exhausting effect of the large discharge of pus from these spots, she has continued advancing in convalescence, she has gained flesh and muscular power, so that now she can sit up. For this favourable result she has to thank a most wonderful appetite, which never seems satisfied, even with an amount of food which is large for an adult, and which she delights to wash down with wine and porter. No tonics seem of so much use to her as an extra snack at physic time.

The most extraordinary recovery from these pyæmic abscesses after fever you witnessed last year in a girl of sixteen (E. A., admitted September 28, 1860). She had very putrid fever, accompanied by hæmoptysis, epistaxis, and bloody discharge *per vaginam*. She got well through her fever by the help of hydrochloric acid and wine. But as she became convalescent in the third week in October, she began to have large boils or abscesses on the head; these were followed by abscesses running down into sloughing sores on the back. During the first week in November inflammation and swelling of the left leg began. This quickly ran on to purulent infiltration of the whole of the left thigh which, on November 28, discharged two pints of pus in twenty-four hours, and lesser quantities daily for weeks together. On December 12 there was a large abscess in the axilla, which was opened and discharged several ounces of pus. Her state of debility was such that she could not in the least help to feed herself. Yet all this time her stomach was in a state that a gourmand would regard as the seventh heaven. She was literally always hungry. As she swallowed her last bit of beef-steak she would feebly ask when she was to have some more, and what would be her dinner to-morrow. And the way her eager eyes followed any particle of victuals that passed her bed was quite affecting. She could fully have sympathised with the British tar who defended the West Indian climate:—"Bad climate this? I call it a capital climate; you're always thirsty, and there's lots to drink." So we allowed her wonderful appetite full swing, and fed the delicate puny maid like a gigantic navvy or gladiator. The consequence was that she recovered from an amount of purulent disease which it would have seemed impossible for the human frame to support, and recovered perfectly, for I saw her in April looking as healthy and walking as briskly as if she had never been ill.

The moral of these cases is, do all you can to increase the appetite. Judge of the value of this drug and that drug,

(d) Published in the *Lancet*, January 30 and February 6, 1858.

this tonic and that tonic, solely by the effect it has on the desire for food. If any remedy lessen this, insist upon leaving it off, whatever authorities may have recommended it; and form your judgment, not from tradition or prescription, but from its action in the individual case before you.

ORIGINAL COMMUNICATIONS.

THE LITHIA SPRINGS OF BADEN-BADEN.

By J. ALTHAUS, M.D., M.R.C.P.

The salts of lithia, into the pharmaceutical properties of which Lipowitz and Mr. Alexander Ure were the first to inquire, have recently been prominently brought under the notice of the Medical Profession by Dr. Garrod, who recommends them in cases of uric acid diathesis connected with gravel, and in cases of chronic gout. This recommendation is based upon the fact that lithia possesses a great affinity to uric acid, and that the urate of lithia is the most soluble of all the urates.

Lithia is especially found in the lepidolite, a kind of mica which occurs in the granite of Bohemia, and from which it is prepared in chemical manufactories. From one of these fabrics, about forty pounds of carbonate of lithia are annually sent to this country, where the salts of lithia are now so much in demand that they can scarcely be supplied in sufficient quantities. The amount of lithia, which had been found in mineral waters up to the present time, was very trifling; and it was the great rarity of this substance which prevented Mr. Ure from following up his researches on it. Quite recently, however, Professor Bunsen, of Heidelberg, has shown, by a new method of investigation, that lithia is, indeed, a substance which is most universally encountered in Nature. It is well known that many substances, when introduced into a flame, have the property of imparting to the spectrum of the flame peculiar and brilliant rays, which are especially striking when the heat of the flame is very great, and its light insignificant. Upon this fact the Professor of Heidelberg has based a method of qualitative chemical analysis which has considerably enlarged the domain of chemical investigations, and has allowed to solve problems which were hitherto believed to be unapproachable. By means of this method, Professor Bunsen discovered in the mineral springs of Dürckheim two new metals, to which he has given the names of Cæsium and Rubidium, which are closely related to potassium, and are the most electro-positive substances known. Concerning lithia, the same philosopher found that its compounds give rise to two quite distinct rays, one of which is of a feeble yellow, and the other of a very brilliant red. By this method $\frac{1}{100,000}$th of a milligramme of carbonate of lithia may be distinctly traced, and one-fourth of a grain of the same salt causes the red ray to continue for a whole hour. The nature of the compound in which the metal exists, has no influence upon the position of the rays in the spectrum, it being the same with the chloride, the bromide, the iodide, the carbonate, the sulphate, the phosphate, and the silicate of lithia; but the intensity of the rays increases in proportion to the volatility of the compounds. Professor Bunsen has by this means discovered lithia, not only in triphylline, triphane, and petalite, but also in a large number of feldspaths, in the granite of the Odenwald, in a common spring at Schlierbach near Heidelberg, in sea-water, in fucus which had been carried by the gulf-stream to the shores of Scotland, in the ashes of tobacco, of grapes, of vine-leaves, of grain of every description, of the milk of animals which had been fed upon grain, etc. Lithia has also been discovered in the ashes of the human blood and muscles. A very large quantity of it was found in two of the thermal springs of Baden-Baden, namely, the Fettquelle and the Murquelle, of which the former contains 0,2315 grains of chloride of lithia in sixteen ounces of water, and the latter 2,3649 grains of it. In one hundred pounds of the salt extracted from the Murquelle nine and three-quarter pounds of lithia are contained; that is, a quantity of this substance worth £90 sterling. This amount is not equalled by that contained in any other mineral spring which has yet been examined.

In consequence of the analysis of these springs, made by Professor Bunsen, they have, during the last season, for the first time been extensively used in cases of gout and lithiasis; and I am indebted to my friend, Dr. Ruef, of Baden-Baden, who has treated a large number of cases of that description with them, for the following particulars regarding the result of their administration.

The physiological effects observed after taking the waters are as follows:—At first it promotes digestion, and a feeling of well-being is induced; but after they have been taken for some time, and especially when in large doses, sickness, disposition to vomiting, and diarrhœa ensue, which in most cases, however, gradually disappear, but sometimes continue as long as the water is drunk. A constant effect is an increased elimination of urine, the quantity of which is often doubled or even trebled; it becomes turbid after some time, and large quantities of a reddish sediment are deposited in it. In some of the patients treated by Dr. Ruef, profuse perspiration came on after from five to ten days, and continued as long as the water was drunk; in the case of a lady who had not freely perspired for years, this perspiration even continued two months after the cure had been finished. It therefore appears that the water is a diuretic as well as a diaphoretic.

Concerning its therapeutic action, in almost all cases the pain in the joints increased at first (especially in those patients who were in the end cured) to a rather high degree, but it never spread to healthy parts. In joints which were perfectly contracted, crackling, dragging and pulling was felt, as if the articulation was being torn asunder; but after such an attack of pain, a sensation of easiness and decided improvement was felt, and the mobility of the limb was much increased. In one patient, a Physician from Epernay, a regular fit of gout came on during the use of the water, under the continued use of which this patient so rapidly improved that he could walk about again after three days.

Gouty affections of the joints, of the sheaths of the nerves and the muscles, if not of very long standing, were cured after three or four weeks, and have remained so up to the present moment. In periodically-recurring headache on one side, which is often due to gout, the effects were also very beneficial. A lady who had been contracted for fourteen years, and who could neither stand nor walk nor carry a spoon to the mouth, was by the use of this water so much improved that she was able to walk a little, and to stand and eat by herself; while no former medication had relieved her. This patient also suffered from dysmenorrhœa, the most prominent symptoms of which were severe abdominal pain; oppression and asthma, cold and paralysis of the left arm. She had only taken the lithia water for eight days when the catamenia appeared, and were unaccompanied by any unpleasant symptoms whatever; nor did these latter reappear afterwards. In a male patient whose finger-joints were infiltrated with urate of soda, which was visible in white specks through the skin, these infiltrations were removed and the swelling diminished.

The mode of administering the water was as follows:—For patients with whom large quantities of water do not agree, five grains of the carbonate of lithia were added to a bottle of the water of Murquelle, which contains five grains of chloride of lithia; and the water was then impregnated with carbonic acid in order to render the carbonate more soluble. Of this water a tumblerful was drunk three times a-day; and if an increase of the dose appeared necessary, two or three grains of the carbonate were added to every glass. If patients are able to keep much water on the stomach, they may take six or eight tumblersful of the Murquelle, without any artificial addition of carbonate of lithia. Baths with water of the same spring were also given; and the Administration of the Spas of Baden-Baden are now occupied in preparing a mother-lye from the water of the Murquelle, in order to gain so much of the salt that it may next year be added to the baths. Of all the antarthritic remedies offered by the springs of Baden-Baden, none have proved so beneficial as this lithia spring. Dr. Ruef has, in some cases, at the same time employed the Russian vapour-baths prepared from the steam of the hottest spring of the place, which has a temperature of 155° F.

18, Bryanston-street, W.

FIVE CASES OF OVARIOTOMY.

By T. SPENCER WELLS, F.R.C.S.,
Surgeon to the Samaritan Hospital, etc.

In the *Medical Times and Gazette* of May 25, in the present year, may be found a report of three cases of ovariotomy, making twenty-four cases in which I had operated up to that time. In accordance with the rule I have hitherto acted up to of publishing every case in which I may perform this operation, the following five cases are submitted to the Profession :—

Case 25.—C. B., aged 34, single, called at my house early in 1860, just after she had been dismissed incurable from an Hospital, suffering from a multilocular ovarian cyst of about three years' growth. I thought it a very favourable case for ovariotomy, and advised her to submit to the operation without delay; but I did not see her again for about eighteen months. She had been advised, in the meantime, to trust to palliative treatment, and had led a very miserable life, gradually becoming larger, and suffering more and more from the pressure of the tumour. At length she consulted Mr. Fergusson, who advised her to apply to me, and I saw her on the 22nd of last June. She was then only able to sleep when sitting in a chair. Her legs were œdematous, and the abdomen measured sixty inches in circumference, sixteen inches from ensiform cartilage to umbilicus, and thirteen from umbilicus to symphisis pubis. I told her that the case was not a favourable one for operation ; but, as she could not last long without relief, as ovariotomy was the only resource, and as she was most anxious to submit to it, she was admitted into the Samaritan Hospital on June 24, and I removed the tumour on the following day. Dr. Koepl, of Brussels, was present, in addition to my colleagues and several other visitors. About thirty-five pints of fluid were first removed, and then a semi-solid mass, weighing twenty pounds, was gradually withdrawn without much difficulty. The pedicle was secured outside the wound. The patient went on remarkably well for four days after operation, but then began to sink very suddenly and died. At the post-mortem examination some recent lymph on the anterior surface of the liver was the only sign of peritonitis; but there was a good deal of turbid serum in the peritoneal cavity, and the intestines were much inflated. There was no blood in the abdomen. The pedicle had been cleanly divided, and it appeared that death had taken place from simple exhaustion.

I think the practical lesson from this case is the danger of putting off ovariotomy until it is too late. The patient had been persuaded to wait until the tumour had grown to an immense size, and her health was broken down ; yet the removal was easily effected, and she went on so well for four days that there would have been every prospect of success had the operation been performed when I first advised it. It is true that she might have died then, eighteen months earlier than she did; but her life during those eighteen months was a life of almost constant suffering.

Case 26.—A married woman, aged 31, was admitted into the Samaritan Hospital, on the 2nd of July last. She had been quite well until her marriage in the previous September, was always "regular" until then, and once three weeks after marriage, but the catamenia had not appeared since. About a fortnight after marriage she had a good deal of pain on both sides, low down, but more on the right, attended with sickness, and she soon found that she increased in size. She went to Guy's Hospital in October, was tapped there on December 26, and "three pailfuls" of fluid were removed. Six weeks after this she was tapped for the second time by Mr. Coleman, of Plumstead, and four times afterwards, at intervals of four or five weeks; six times in all. After the last tapping, secondary cysts were felt. On admission, the circumference of the abdomen at the umbilical level was fifty-five inches, and the distance from ensiform cartilage to symphisis pubis was thirty-four inches ; the umbilicus being exactly half-way between the two points. She was much emaciated, and suffered from vomiting; and the pulse was 120. It being necessary to afford relief at once, and her state not being satisfactory for ovariotomy, I tapped on July 8, and removed twenty-eight pints of viscid fluid from a large cyst above the umbilicus. This being followed by relief, I tapped again, two days afterwards, and removed thirty-three pints of fluid from another cyst, below the umbilicus. Some restlessness and vomiting followed this second tapping for three or four days; but by the 16th she was much better. The bowels acted naturally, the tongue was clean, and the pulse down to 110. But the cysts began to fill again very fast, and it became quite clear that if ovariotomy was to be done at all, it must be done without delay. Accordingly, I operated on July 17. Professor Simpson was present, and several other visitors. Mr. Clover administered chloroform. After opening the peritoneal cavity by the usual incision, I found that it contained several pints of ovarian fluid, which must have escaped from the lower cyst after the last tapping. Some extensive parietal adhesions were broken down, and the cysts removed. The peduncle was secured without difficulty. Two vessels in the abdominal wall, opened in separating the adhesions, bled freely. One was tied, and the ligature cut off short. The other was very easily stopped by acupressure, on the suggestion of Dr. Simpson, a hare-lip pin being passed across it through the abdominal wall. The wound was closed in the usual manner. There was a great tendency to vomit for several hours after the operation. Late at night half a drachm of laudanum was injected into the rectum. The pulse was 110. The sickness abated during the night, but on the morning of the 18th retching was still troublesome. Pulse 120. Opium repeated. There was occasional sickness during the day. At 2 p.m. I removed the acupressure needle. At 7 the pulse got up to 140, and the sickness was more urgent. I then removed the pin which transfixed the pedicle, thinking that the traction on it might be keeping up the sickness. But the sickness did not abate. She continued to throw up large quantities of coffee-coloured fluid, and gradually sank exhausted in the afternoon of the second day after operation.

The post-mortem showed nothing but turbid serum in the peritoneal cavity, and intestines distended with gas ; no blood nor clot. The wound was well united, and the ligature on the pedicle nearly separated. It was clear that death took place from exhaustion, partly the result of the uncontrollable vomiting.

Case 27.—A single woman from Wolverhamptom, aged 27, was admitted on July 16 to the Samaritan Hospital, suffering from a large ovarian cyst, apparently unilocular, or nearly so. She had never been tapped, and was in fair general health, although she had had to give up her place as servant three years before and live at home. The enlargement had been noticed since the age of 16. After explaining to her what might reasonably be expected from simple tapping, and from the injection of iodine, and putting fairly before her the danger of ovariotomy, she much preferred this operation to either of the other plans, and the operation was fixed for a day about ten days before the catamenia were expected; but they came on unexpectedly, and lasted till August 2. The 7th was then fixed upon, and I removed the cyst on that day, Dr. Forbes Winslow, Dr. Hilditch, R.N., Dr. Roberts, of Manchester, Mr. Nicholson, of Stratford, Mr. Gutteridge, of Birmingham, and other gentlemen being present. After exposing the cyst by an incision between three and four inches long, midway between the symphisis pubis and umbilicus, forty-four pints of limpid fluid were removed by the trocar, and the cyst gently withdrawn as it was emptied. One long narrow band of adhesion was divided. The peduncle was short and very broad, and contained some unusually large veins. Several smaller cysts were grouped at the junction of the principal cyst and its peduncle. The wound was closed in the usual manner. This patient recovered without a single unpleasant symptom, and is now strong and well. On measuring the cicatrix before she left the Hospital, it was found to be exactly one inch and three-quarters in length.

Case 28.—In May, 1860, I saw a patient from Jedburgh, with Dr. Grant, of Connaught-terrace. She was single, aged 34, and suffering from an ovarian tumour. It seemed to have been of about a year's growth, but she had not consulted any one until she went to Dr. Grant, two months before my first seeing her. There were no urgent symptoms, and we advised delay, occasionally seeing her together. Early in August Dr. Rigby saw her, and after consultation with him and with Dr. Grant, it was agreed that I should tap her. I did so on August 20, and removed thirteen pints of thick coffee-coloured fluid, containing a good deal of coagulated blood. She did not suffer from the tapping, and soon returned

to Scotland. She filled very slowly, and remained in good health; but it became necessary to tap again, and I did this with Dr. Grant last May, nine months after the first tapping, removing at this second operation twenty pints of a thinner fluid than before. But it was evident that some groups of secondary cysts had grown since the first tapping. She filled again slowly, and it was agreed, after consultation with Dr. Grant and Dr. Falla, of Jedburgh, that I should perform ovariotomy about a week after the cessation of the menstrual period in August. Accordingly, I operated at her lodgings on August 15. Mr. L. R. Cooke administered chloroform, and I was kindly assisted by Dr. Grant, Dr. Rogers, and Mr. Obrè. There were no adhesions, and a multilocular cyst, weighing with its contents about seventeen pounds, was easily removed without a drop of ovarian fluid getting into the peritoneal cavity. The pedunele was secured outside by a clamp, which was left on. The wound was closed in the usual manner. She went on perfectly well, but some considerable pain led to the injection of twenty drops of laudanum into the rectum every three or four hours. The pulse never rose above 88. On the 19th I found that she had had a restless night, which was explained in the morning by the unexpected appearance of the catamenia. On the 20th I removed the last of the sutures, but left the clamp undisturbed. I was called suddenly that evening to an important case on the Continent, and was away from London for ten days. During that time Mr. Cooke, of Charlwood-street, carefully attended to the case, and I found my patient convalescent on my return. Mr. Cooke had not touched the clamp, so I removed it. Three weeks after operation the patient was down stairs, and soon afterwards returned to Scotland, and is now in excellent health.

Case 29.—On the 30th of last September I was requested to see, in consultation with Dr. West, Mr. Paget, and Mr. Vevers, of Hereford, a lady who was suffering from ovarian disease and ascites. She was 52 years of age, and had had three children, the youngest of whom was 11 years old. The catamenia ceased in May, 1859, having been irregular for some time before. The abdominal tumour was first noticed in June, 1859, rather more to the right than to the left side. The legs swelled occasionally. Dr. West informed us that in November, 1859, the abdomen measured 35 inches in circumference, and that during the next thirteen months, *i. e.* up to December, 1860, it increased to 42 inches. At the end of May, 1861, it became necessary to afford relief, and she was tapped by Mr. Vevers, of Hereford. Ten pints of clear straw-coloured fluid, sp. gr. 1021, were removed from the peritoneal cavity; and twenty pints of a darker fluid, sp. gr. 1022, from an ovarian sac. A tumour still remained on the right side, reaching from the right iliac to the right hypochondriac region. There was no albumen in the urine. No inflammatory or other symptoms followed the tapping. By September 2, 1861, the abdomen had increased to about its size before tapping, and measured 45 inches in girth; and our consultation was held on the 30th to consider whether simple tapping again, or ovariotomy, should be recommended. The points in favour of operation were, that the lady appeared to be in a fairly good state of general health, that the tumour was freely moveable in the ascitic fluid surrounding it, that the central situation and free mobility of the uterus gave good reason to hope for a fair length of pedicle, and that I had had two successful cases in which similar ovarian tumours had been surrounded by ascitic fluid. It was also felt that such cases if left to themselves are more rapid in their progress than are ovarian tumours unaccompanied by ascites; and a few months, or at most a year or two, would probably be the extreme length of life if the lady were left alone or simply tapped, while there would be always some danger attending each tapping. The points urged against the operation were the age of the patient, and the fact that there was considerable anasarca. But, as the urine was free from albumen, the anasarca was attributed to the pressure of the tumour; and I had had successful cases of ovariotomy in older persons. Taking all this into consideration, Dr. West represented to the patient our conclusions that the case was a "fair average" one for the operation—that there were reasons against it and others in its favour—leaving the decision entirely to herself. On the next day I was requested to perform the operation, and I did so on the morning of October 3. Mr. Vevers administered chloroform, and I was kindly assisted by Dr. West, Mr. Paget, and Dr. Collum. I agreed with Mr. Paget that we would only allow a part of the ascitic fluid to escape on first opening the peritoneum, leaving the remainder as a protection to the intestines until after the tumour had been removed. This we effected completely, for Mr. Paget kept the cyst pressed forward towards the incision before much ascitic fluid had escaped, and while the contents of the principal cyst were running off through a large canula. After emptying some secondary cysts, the whole of the tumour came away without our once even seeing the intestines. A broad pedunele was secured by a clamp, and the tumour cut away. The pedunele was then transfixed behind the clamp and tied in three portions. The clamp was then removed, when two vessels on the surface of the cut portion bled and were tied, as the ligatures around the pedicle did not completely stop the bleeding. The remainder of the ascitic fluid was then allowed to escape, and the wound closed in the usual manner, the stump of the pedunele being easily secured outside. We noticed that the peritoneum, instead of being smooth and glistening as usual, had a rough, red, granular appearance, as if it had suffered from chronic inflammation. The cyst and contents, together with the ascitic fluid, weighed about 35 pounds.

The patient went on remarkably well during the day, and passed a good night. She was almost free from pain, and was quiet, smiling, and cheerful. There was some oozing of bloody serum, and a little blood, from the stump, so in the afternoon of the day after the operation I re-applied the clamp close to the ligature. She appeared rather restless, and the pulse was becoming rapid; but she seemed to be going on very well, not having been troubled by pain or sickness. Dr. West and I saw her together at ten at night, when the rapidity of the pulse (130) was the only sign to excite uneasiness. But I was called at three in the morning and found her collapsed. The nurse then said that she had complained of being cold and sick soon after twelve o'clock, but had soon recovered, until the alarming symptoms came on. She took brandy and champagne; beef-tea and brandy were injected into the rectum; hot poultices were applied to the abdomen; hot bottles to the feet, etc., but all proved quite useless, and she died forty-seven hours after operation.

At the post-mortem examination we observed proofs of extensive peritonitis, both recent and of old date. The left ovary was healthy. The right ovary had been removed. The broad ligament on this side was greatly hypertrophied, and a small piece of slough upon it enclosed in a ligature was fixed to the lower part of the opening made in the abdominal parietes. There was not a drop of blood, nor any clot, in the abdominal cavity. The peritoneal edges of the wound were perfectly united, and so folded together that the pins were completely concealed. The marks of peritonitis were not most intense around the operated parts, but in the neighbourhood of the liver.

These five cases represent very fairly three classes of patients by whom we may be consulted as to the propriety of submitting to ovariotomy. In two cases the patients were so broken down that the prospect of success was small, and they both died. In two others the general health was so good that I had little doubt of success, and they both recovered. The third was, as we said, a "fair average" case, where the decision may properly be left to the patient. In this case the result was unsuccessful; but I have had two others, quite as unfavourable to all appearance, where success was complete.

3, Upper Grosvenor-street.

Election of a Surgeon to the City of Dublin Prisons.—On Monday, the 18th inst., the Grand Jury of the County of the City of Dublin, having been instructed by the Right Honourable Mr. Justice Fitzgerald that the power to appoint a Surgeon to the City Prisons was vested in them, elected Dr. Humphrey Minchin, out of a large number of candidates, in the room of Surgeon Alexander Read, resigned. The matter, however, can scarcely be considered settled, inasmuch as, previously to the election, a formal notice was served upon the Grand Jury, on the part of the Corporation of the City of Dublin, and of the Board of Superintendence of the City of Dublin prisons, to the effect that it is the intention of these bodies "to dispute the validity of such election, and to resist, by all legal means, the intention of any gentleman so to be elected."

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

Assistant-Physician to the Metropolitan Free Hospital.

CASES OF DEAFNESS ASSOCIATED WITH SYPHILIS.

Cases of deafness in association with congenital syphilis are not uncommon; but here we are not able so distinctly to name the special structures attacked as in the case of syphilitic diseases of the eye. Probably there are cases analogous both to corneo-iritis and to the form of amaurosis which we mentioned in our last number. Probably in one are attacked certain structures (whatever they may be) which correspond to the cornea, iris, and choroid, and in others the auditory nerve. It would be easy to note the parts which syphilis chiefly affects, and if from a large collection of facts any law as to the precise structures it chiefly affects could be drawn, it would be valuable. To take the viscera of the three great cavities: it is well known that syphilis not unfrequently attacks the abdominal organs, liver, and spleen, rarely the lungs, and scarcely if ever the cerebral mass. In one case only which we have given was there any disease of the substance of the brain, and this was on the surface, and appeared to have begun in the dura mater. In most of the others there was either some disease of the bones and membranes, or probably neuromata on certain nerves. John Hunter said that syphilis never attacked the nervous system. Making allowance for the fact that disease of the cerebral mass must in many cases cause death, before any well-marked change could be produced, we cannot help concluding that the abdominal organs are of the viscera those most prone to be affected. This may be from the presence in those parts of more areolar tissue rather than from any physiological choice for these organs, as parts of the nutritive system.

Strictly speaking, the cases of deafness which we are going to relate are probably analogous damages to the apparatus of sense, as iritis or choroiditis in the eye, rather than affections of the parts of the nervous system connected with the ear. It would be interesting to ascertain by dissection if syphilis does chiefly affect the parts accessory to the expansion of the auditory nerve, as it does the parts accessory to the expansion of the optic nerve. Again, it would be of value, physiologically as well as pathologically, to ascertain if those parts are, as the cornea is in the case of the eye, the modified cutaneous surface(a). By doing this with other parts, by noting at least the frequency with which certain organs, both early and late in the disease, were attacked, we might possibly arrive at some general law to explain *how* it is that syphilis manifests itself chiefly in certain parts. Dr. Laycock, of Edinburgh has worked a good deal at the view that certain diseases attack certain parts of the system, which are developed from the same primordial elements.

Of one hundred cases of congenital syphilis collected by Mr. Hutchinson, ten were noted to have been deaf, and of these nine became deaf after otorrhœa. The following is a case, in which there is no history of discharge from the ear prior to the deafness, and here the deafness is total. If, when the deafness was commencing, treatment for syphilis had been adopted, no doubt to a great extent the deafness might have been prevented. It would be worth while, in these cases, to ascertain if there is any intolerance of sound, analogous to the intolerance of light in the inflammatory attacks (syphilitic and strumous) of the superficial parts of the eye.

Case 1.—*Deafness from Hereditary Syphilis.*—Eliza T., aged 15, was admitted under the care of Mr. Hutchinson, at the Metropolitan Free Hospital, on October 23. The aspect of hereditary syphilis was well marked. Teeth typical. The irides were steel grey, pupils irregular, and the corneæ dim from an attack of kerato-iritis at the age of three years. For this attack she attended at Moorfields for one year, under the care of Mr. Critchett. She regained fair health, and was able to read easily. She had good hearing until about three years ago; she had then some pain and much noise in the ear. The right ear began to fail first, but the other began soon after; and in the course of a year she had complete loss of all hearing. There was at no time the least discharge, until the last few months, when a little watery fluid has run out. She is now quite deaf, and can converse only by her fingers (the deaf and dumb alphabet). Since her deafness she has got to speak thickly and almost in a whisper. Her mother had had six children, of whom the patient is the youngest living. She (the patient), when an infant, had a slight rash; when nine months old she had for two months a fit of illness, but no special symptoms of it are recollected. Three brothers, older than the patient, are well, and have never ailed anything particular. Two girls, one born before Eliza and one after, died in infancy.

Case 2.—*Tertiary Syphilis—Deafness after Otorrhœa—Paralysis of the Right Portio Dura—Paralysis of the Tongue.*—Mary Ann T., aged 44, was admitted to the Royal Free Hospital, under the care of Mr. Wceden Cooke, on February 9, 1859. She had had syphilis twenty-three years previously, and subsequently occasional outbreaks of a tertiary character, ulcers on the arm and forehead, otorrhœa of the right ear, with a scaly eruption of the pinna. At the time of admission the otorrhœa and scaly eruption were present, and she was very deaf with the right ear, but the left ear retained all its auditory power. Six days previous to admission she found on awaking that the left angle of the mouth was very much drawn to that side, she had much difficulty in using her tongue to express her feelings and wants, and when protruded it inclined greatly to the right side. She could not close completely the right eyelids. There was no loss of sensation of the right side of the face. She was ordered to be galvanised every other day, and to take quinine and iron in full doses. A week after admission the proper action of the tongue was quite restored, but that of the right eyelids was still very imperfect, and there was much lachrymation. A blister was then ordered behind the right ear, and to continue the quinine and iron. Another blister and persistence in the tonic quite cured her in a month, with the exception of the deafness of the right ear. Mr. Cooke remarked that the action of the tongue in these cases is a peculiarity worth noting. The facial muscles were distorting the face on the left side. The tongue was extruded towards the right. Of course, it was the *excess* of vigour on the left side which protruded the tongue towards the right, as it also was the cause of the abnormal contraction of the muscles on the left side, when not counterbalanced by the compensating power of the right.

The following is one of those cases in which Mr. Lee believes paralysis (reflex) followed from irritation to the dura mater from disease of the cranial bone, and he attributes the patient's recovery to the removal of that irritation by trephining. It will be well to bear in mind that the patient took iodide of potassium:—

Case 3.—Elizabeth B., aged 50, admitted into the Lock Hospital, under the care of Mr. Henry Lee, on May 4, 1861. The following is the report of the case by Mr. Cocks, House-Surgeon:—Patient states that she has been married twice, but during the life of her first husband she was quite free from all disease. Ten years ago she married again, and from this period she dates the disease, though she cannot remember the primary sore. Until eight months ago she suffered no constitutional disturbance, but about this time two abscesses formed on the forehead, which burst, discharged, and left bare bone at the bottom, more extensive on the left than the right side. The patient is a pale and nervous woman, and trembles, but more especially on the left side—arm and leg: this has only come on since the abscesses formed. She is also very deaf.

On Thursday, May 9, the patient being under the influence of chloroform, Mr. Lee removed the dead bone with a trephine, on the right side, and also the whole thickness of the exposed bone on the left side of the os frontis. The outer table was here necrosed; but the middle and inner tables had retained their vitality. The inner table in contact with the dura mater was rough and irregular.

(a) "The tympanum and auditory meatus are both offshoots from the external integument."—Dalton's "Physiology," p. 625.]

May 10.—Wounds look healthy; poultice applied. Iodide of potassium ten grains in the day, in a pint of decoction of sarsaparilla.

11th.—Wounds look well, discharging freely; the pulsation of the brain can be seen in the wound on the left side.

17th.—Since the last note, the patient has continued to improve without a single bad sign.

22nd.—Wounds still rapidly improving. She has nearly lost all trembling, and can hear very much better; gets up every day.

24th.—Wounds nearly closed; water-dressing applied. Has quite lost all trembling; hearing nearly perfect; health restored.

27th.—Complains of a slight pain in her head to-day for the first time; hearing still improving; no return of the trembling. Water-dressing still applied.

29th.—The pain in her head has quite gone; can hear as well as ever.

June 8.—Since the last note the wounds have closed up very much; no bone has come away since the operation.

16th.—Wounds all but healed; water-dressing still applied.

18th.—She left the Hospital to-day at her own request, with a very slight wound on her forehead. Since May 11 she has taken ten grains of the iodide of potassium every day.

J. H. J.

ST. BARTHOLOMEW'S HOSPITAL.

INTUSSUSCEPTION OF THE LARGE INTESTINE—THE CŒCUM PROTRUDED THROUGH THE ANUS, AND THE SMALL INTESTINE TERMINATING BY A VALVULAR OPENING AT THE ANUS—DEATH—AUTOPSY.

(Under the care of Dr. EDWARDS.)

[Reported by Mr. FAIRBANK.]

William Henry S., aged 3½, was admitted on September 26, 1861. He is a sparely nourished child, lying on his right side with legs drawn up; countenance pale and anxious; skin warm, and perspiring gently; pulse, 100, small, and rather sharp; tongue thickly furred on dorsum; papillæ enlarged and red at tip; bowels open once since admission—motion reported slimy and blood-stained; appetite bad; vomits all his food; is very thirsty; sleeps pretty well; complains of pain in abdomen; gut very much protruded.

History.—His father says that about eight months ago he used to complain of pain in his stomach, and of swelling in the right side of his abdomen, both of which went away when the abdomen was rubbed. He, however, continued pretty well, notwithstanding occasional attacks with the same result, till about four months ago, when his bowel first came down. It was, however, returned without difficulty. Since then the bowel has come down several times, and on some occasions has remained down for two or three days before it was returned. He has also been losing flesh for four months. On Monday last, September 23, he seemed tolerably well, and went out in a cart with his father; but on Tuesday the bowel came down, and has remained so ever since, and he has also vomited his food and complained of pain in his abdomen. Has suffered during the last eight months from occasional diarrhœa and constipation. Is generally a healthy child.

September 27.—Passed a restless night. This morning, about 7 a.m., he took a little tea, which he kept down, and about 8.30 a.m., when the nurse was washing him, he put his head on her shoulder and groaned. She immediately laid him down in the bed again, but he never rallied. He died at 8 45 a.m.

Autopsy, Twenty-six Hours after Death.—Rigor mortis present in lower extremities. Body emaciated. A portion of bowel of conical shape, about 2½ inches in length, is protruding from the anus. A large mass is to be felt in the left side of the abdomen. Thorax: Thoracic viscera all seemingly healthy, except that the posterior part of the upper lobe of left lung contained a little tubercular deposit; the pericardium contained no fluid; the left ventricle was the only portion of the heart in a state of cadaveric rigidity. Liver natural. Kidneys normal. Spleen somewhat small. Intestines: On the left side of the abdomen lay the whole of the large intestine, forming the firm mass previously felt through the walls. The cœcum, ascending and transverse colon, had become invaginated into the descending colon, sigmoid flexure, and rectum, to such an extent that the portion of bowel protruding through the anus was found to consist of the inverted cœcum and appendix vermiformis; whilst the external transverse opening, occupying about one-third of the circumference of the bowel on its anterior aspect, about equidistant from the anus and the extremity of the protruded portion, through which water injected into the upper part of the intestine escaped freely, was formed by the lower end of the ileum at its point of union with the cœcum. The intussusception was nowhere double, though the lower portion of the ileum occupying the centre of it was so far convoluted in consequence of its mesenteric attachments that a probe could not be passed down through it. Lying beneath the mass of the large intestine, the descending colon being much more free than usual, were a number of coils of the upper part of the jejunum, small, pale, and empty. The lower part of the ileum, for some little distance above its entrance into the intussusception, contained a considerable quantity of fluid fæcal matter, by which it was somewhat distended, its coats being at the same time red and thickened. The principal part of the great omentum had been dragged down into the space between the serous surfaces of the intussuscepted bowel, and the pancreas had also been partly dragged from its natural position and was all but engaged in it. The right iliac fossa presented a smooth surface, apparently of peritoneum; the only point where there were any signs of the tension to which the serous membrane must have been subjected being opposite to the upper half of the right kidney, where it appeared to be stretched from right to left, and was highly vascular, numerous small minutely injected vessels running parallel with the fine cords into which it had been drawn.

ST. THOMAS'S HOSPITAL.

CASE OF BRONZED SKIN—DISEASE OF THE SUPRA-RENAL CAPSULES.

(Under the care of Dr. BARKER.)

[Reported by Mr. MORTON.]

Wm. F., aged 14, was admitted on Oct. 14 into St. Thomas's Hospital, under the care of Dr. Barker. The discoloration of the skin first made its appearance four months ago, previously to which he had had very good health. It gradually increased in depth of colour and extent. His appetite was very poor; he felt frequently nauseated, and he sometimes vomited. On admission, there was much emaciation; tongue unnaturally smooth and glazy; no headache; no cough; bowels confined. Complained of pain in right hypochondriac and umbilical regions. The bronzing was most marked over the abdominal and lumbar regions, and inside the thighs. There was also, in this case, a great deal of desquamation of the cuticle.

On admission, he was ordered a warm bath, and on the 17th syrup of the iodide of iron, with generous diet and wine. His appetite, however, continued very poor; he grew weaker and more emaciated, and finally sank on the 19th, at 5.45 p.m., having been almost pulseless for some hours, and complaining of soreness in his throat.

Autopsy, October 22.—The supra-renal capsules were found to be completely disorganized through deposition of tuberculous matter. They were of normal size, of firm consistence, and when cut into showed various points of calcareous matter. All the other organs appeared to be healthy, with the exception of the lungs, which showed very slight deposit of tubercle in both apices. Under the microscope, the rete mucosum showed no deposit of pigment granules, but simply a general discoloration of the tissue. The blood was not examined.

CLINICAL REMARKS ON CHOREA.

(Cases under the care of Dr. PEACOCK.)

A series of cases of chorea has been under treatment in Dr. Peacock's wards at St. Thomas's Hospital, which well illustrates the facility with which the disease yields to treatment in some cases and its obstinacy in others, and the advantages which in the latter class of cases result from a change of remedies from time to time.

The first case was that of a girl, 8 years of age, who had

never before suffered from the disease, and in whom the symptoms were of two weeks' duration. She was directed to have aperients at intervals, the tepid shower-bath, and to take the sulphate of zinc and valerian—at first in two-grain doses, and subsequently in the dose of twenty grains three times daily. She was discharged, entirely cured, in two months.

The next case was that of a female, in which chorea appeared as usual from a violent mental shock; but the patient was 57 years of age, much beyond the period of life at which the disease ordinarily appears, and the affection had continued four months at the time of her admission. The treatment employed was mild aperients, the shower-bath, and the exhibition internally of the saccharated carbonate of iron—at first in ten, and subsequently in twenty-grain doses. After two weeks, no material amendment being manifested, she was directed to take the liq. potassæ arsenitis, in doses of ♏iv. three times daily; the dose was subsequently increased to ♏viij., and was continued for six weeks. During this time there was some, but not marked, improvement, and the sulphate of zinc and valerian were then had recourse to, the former remedy being ultimately given in a dose of twenty grains three times daily. It then excited sickness, and after a continuance of six weeks was abandoned. Under the use of the zinc she greatly improved, and was discharged from the Hospital, with, however, some irregular action still continuing in the face and head, which rather took the form of paralysis agitans.

The third case was that of a female, 13 years of age, who had had two previous attacks of chorea, and had suffered under her present seizure for one month before admission. She was directed to have aperients, and to take the saccharated carbonate of iron, in doses of ten to twenty-five grains, three times daily, and to have the tepid shower-bath. After this treatment had been continued for two weeks with but little benefit, it was replaced by the zinc and valerian, and the dose of the sulphate of zinc was carried in seven weeks to the extent of twenty grains three times daily. The symptoms were materially relieved by this treatment, but not cured; and the liq. potassæ arsenitis was now given in doses of four minims three times daily. After taking this remedy for two weeks, the spasms entirely ceased, and the patient was discharged in another fortnight, during which she took the quinine and iron, quite well.

THE PROPRIETORS

Have decided, in consequence of the Repeal of the Paper Duty,

TO

REDUCE THE PRICE OF THIS JOURNAL.

In coming to this decision, the Proprietors follow the example so extensively set by the Public Press, and they trust that the Medical Profession will view with favour this response to the suggestions and inquiries of many Subscribers.

From January 1, 1862, the Price of

THE MEDICAL TIMES AND GAZETTE

WILL BE

Unstamped, *Sixpence;* Stamped, *Sevenpence.*

Medical Times and Gazette.

SATURDAY, NOVEMBER 23.

MEDICAL SUPERINTENDENCE AT COLNEY HATCH.

"A Medical Superintendent is wanted at Colney Hatch Asylum." Such was the tenour of an advertisement which a few weeks ago appeared upon the cover of this Journal; and although an election has taken place, and a Medical gentleman will shortly be inducted into the vacant office, we repeat here the announcement that a Medical Superintendent *is wanted* at the Lunatic Asylum at Colney Hatch. How is this? Such a question may well be asked by anyone not initiated into the mysteries of Middlesex magistracy, and especially not learned in the art of driving a coach-and-six through an Act of Parliament. Anybody of ordinary understanding, and tolerably versed in grammatical construction, would, we imagine, find no difficulty in comprehending the meaning of the following clause in the Lunacy Act:—The Committee of Visitors "shall from time to time appoint the Medical Officer, or one of the Medical Officers (if more than one) of the Asylum, or where there is a separate Medical Officer of each division, then the Medical Officer or one of the Medical Officers (if more than one) of each division, *to be the Superintendent of the Asylum* or of such respective division thereof, ... provided always, that it shall be lawful for the said Committee, with the sanction and approbation of one of her Majesty's principal Secretaries of State, to appoint *any person* other than such Medical Officer *to be such Superintendent*," etc.

To our unspectacled vision this direction is clear. Every Asylum is to have a Master or Superintendent; and if it be too large, the establishment may be divided and a Superintendent appointed over each division. That a real Superintendent is meant, and not a merely superior Medical officer, appears clear from the very terms in which the clause is worded; for the Superintendent, if the Visitors please so to direct, and if they can obtain the Secretary of State's sanction to the arrangement, need not be a Medical man at all. He is to be an officer evidently whose duty it shall be to superintend the Asylum, or the division of the Asylum, in all its departments and concerns. He is clearly to be head and master throughout the establishment or his division of the establishment.

What, then, it may be asked, are the arrangements at Colney Hatch? At the present moment there lies before us a copy of the "Regulations and Orders for the Management of the Asylum." The Visiting Justices, in their wisdom and discretion, divide the management into three independent "departments," to each of which a section of the Regulations is devoted. We will, for the instruction of our readers, briefly sketch out the leading points in each. First, as to the Medical Department, it is arranged that "there shall be two Resident Medical Superintendents, one for the Male Department (*sic*) and one for the Female Department (*sic*)." The Act of Parliament, we may observe by the way, would call these "divisions," but the two words are synonymous with these gentlemen. After noticing their qualifications, the Regulations go on to say that the Superintendent "shall be responsible for the *Medical treatment* of the patients," and in another place "shall be responsible *to the Committee of Visitors* for the Medical and *Sanitary Management* of the establishment in his department (division?), and subject to the general rules of the Asylum *and the directions of the Committee;* he shall have control over the Apothecary, nurses, and ward attendants of his department." He shall "classify the patients in his department (division?) and regulate and *determine on the diet for the sick and infirm patients.*" "He shall have control over all the attendants in his department (division?), with power to *suspend* them for misconduct, reporting all the circumstances in his diary at the next meeting of the general or house committee," who then sit in judgment between him and his servants And, lastly (for we pass over the details of his duty), being servant-of-all-work to the Visitors, he is, if the Chaplain goes out to dinner, to perform Divine Service in the chapel. Positively, we are not joking. Throughout the whole of these regulations the statute word "division" never once occurs; it is most studiously avoided; and in order to avoid it the word "department" is used in two senses. We pass over the second section which relates to the "Official Department," to come at the third

which contains regulations "as to the Domestic Department." On this head they direct the duties of the chaplain, steward, matrons, housekeeper, attendants, etc. To one of these officers we will, however, confine our remarks. "There shall be a steward." He shall superintend the brewing, baking, and *all other domestic* "departments" where male servants, labourers, *or patients are employed* elsewhere than in the wards; *he shall have control over the labour of all the male patients who shall be considered fit* for occupation outside the wards *during the time of their occupation;* but he shall not be responsible for the care of such patients in any manner otherwise than for the prevention of attempts at escape. Any peculiarity in habits or behaviour in a patient is to be notified in writing to him by the Medical Superintendent, but no notification is to be returned as to how a patient has been employed or how he has conducted himself. The patient is to be given into his hands, out of the control of the Superintendent, who is still responsible for his treatment.

Now, although to a superficial glance the regulations of the Asylum may appear like the mere details of an arrangement for carrying out the Act of Parliament, no supposition could be further from the truth. The Legislature and the Middlesex magistrates differ in their view of the proper provision to be made for lunatics, and of the regulation and government of Asylums, as much as the two poles. And so we believe do the Commissioners of Lunacy and the Middlesex magistrates. The one appear to regard an Asylum as a place not only for the custody or merely for the safe keeping of lunatics from harm to themselves or others, but also and chiefly in the light of an Hospital devoted to their cure or amelioration; the magnates of Middlesex look upon it as a prison, treat it as a prison, and, in place of looking upon all the patients as really sick, weakly in body and feeble in mind, appear to regard some as absolutely well, but during their detention to be fed and clothed and associated as they think fit, and as may be most convenient to the steward and other officers of the domestic department. The Legislature regards every lunatic in the Asylum as the special care of the Superintendent, and no one of his surroundings, no point in his daily life, no circumstance of food or dress or occupation as too trifling to be removed from his supreme direction, or so foreign to the patient's cure as to belong to a "department" over which he shall exercise no control. The Middlesex Bench, however, consider that the Superintendent should keep strictly to what they think fit to define as his proper sphere: this sphere does not extend beyond the wards and airing-courts; and even there he is not supreme, for everything relating to the domestic care and comforts of the poor inmates is out of his control and in the hands of an independent officer—the steward,—*who is not bound to obey him*, and who, when he does think fit to carry out his wishes, can do it when and as he pleases. If a patient dislikes his clothing, the Superintendent has no power, for instance, to direct an alteration; the patient may regard the usual Asylum dress as an indignity, and may beg for an alteration; but, so long as he is unable to work, the inevitable gray must be worn, unless, indeed, the classification be interfered with to place him in a special ward where other clothing is used. What we complain of is this—that while the Superintendent is responsible for the treatment of the inmates, the officer to whom, above all, he is to look for the material and domestic comforts on which everything depends in the treatment, is not under his orders. Each "department" stands alone, and although the daily exigencies of the house call for subservience, that due subordination is wanting without which the Medical Superintendent must be ever in doubt, ever in uncertainty, as to how far his most reasonable demands on other departments will be met. Even in the matter of attendants, the Superintendent is not supreme. Yes, he can suspend for misconduct; but imagine the case of an attendant restored by the Committee. How much hearty co-operation is there likely to be in future between him and his superior officer? In fine, the nominal Superintendents at Colney Hatch occupy a situation where they are called upon to make bricks without straw, and unless they be blessed with the skin of the rhinoceros we can scarcely imagine a position more disagreeable or more unsatisfactory.

Just after the above article was written, we saw the following account of an inquest in the *Times*. It is the best practical comment that could be made in support of our article:—

"On Saturday, Mr. Brent, Deputy-Coroner for West Middlesex, held an inquest at the Lunatic Asylum, Colney Hatch, on the body of Joseph Bigg, a patient in the establishment. The deceased, it appeared, had for some time been an inmate of ward No. 14, which was appropriated to dirty and noisy patients. About ten minutes to five o'clock last Tuesday afternoon one of the attendants found him lying on his back quite dead, with a handkerchief tied tightly round his neck. Mr. Tyerman, the Medical Superintendent, who made the post-mortem examination, deposed that there was a mark round the neck, the effects of a ligature such as might have been produced by a handkerchief, and behind one of the ears were marks of a man's knuckles. The cause of death was suffocation by strangulation. Rickman, an insane inmate of the same ward, made a statement which went to show that the injuries had been inflicted by Thomas Skinner, another lunatic, who was likewise examined, but his replies were very incoherent and unsatisfactory. None of the attendants were present when the defendant received the injuries which led to his death. The Jury returned the following verdict:—'That Joseph Bigg was found dead in a ward in the asylum aforesaid, and that his death was occasioned by the mortal effects of suffocation from strangulation by means of a certain handkerchief placed round his neck, and that the said handkerchief was placed round the neck of the said Joseph Bigg, and that the said strangulation was thereby caused by some person or persons to them, the jurors, unknown.' The Jury appended the following recommendation:—'The Jury wish to express their hope that in future the instructions of Mr. Tyerman for the dispersion of attendants throughout the ward of which they have charge should be more carefully carried into effect.'"

SHALL ST. THOMAS'S HOSPITAL BE REMOVED?

We well remember a discussion one evening in the tea-room of the Medico-Chirurgical Society. The subject was the late Mr. Jones, of Jersey, whose remarkable success in the most serious operations of Surgery was more than once brought before that Society. Why, it was asked, did he save the lives of a greater proportion of patients after excision of joints than his brethren in town? The answer was unanimous. He had not greater anatomical knowledge, greater boldness, better assistants nor better instruments; but his patients had better air. Low inflammation and fever are the enemies to success in operations in which large surfaces of living tissue are exposed. But they are mere figures of speech. They really mean some sort of semi-putrescent change in the exudations which cover the surface of the wound. It is not the mechanical injury which is fatal in nine cases out of ten, but the subtle catalytic influence of decomposing organic matter in the atmosphere. This it is which sets up "unhealthy action" in the wound, and poisons the blood. That pure air is essential to the success of all capital operations, is now happily a truism.

The authorities of St. Thomas's Hospital, so soon as they are sure of the £320,000, or thereabout, which they expect to receive for their site and buildings, will be able to remove that Institution to some spot where they may add the benefits of pure air to those of the surgical skill, the careful nursing and liberal diet which are now lavished upon the inmates. We will suppose that the welfare of the patients is the test by which the new site is to be chosen; and we will further take for granted that a building consisting of detached wards,

on the modern plan, seated on one of the hills which extend along the Surrey side of the Thames, whether Putney, Wandsworth, or the neighbourhood of the Crystal Palace,—or on the high ground around Hampstead or Highgate—and environed with grounds which shall secure abundance of fresh air, and space for walking exercise, will be better for the patients than a site elose to the swamps and chimneys of Lambeth. The patients would recover more quickly and more thoroughly. We should have fewer claims on "Samaritan Funds" for poor creatures who cannot be safely kept longer in the air of a London Hospital, and yet are too ill to work. To make such a scheme perfect, there should be of necessity a small central receiving-house, where the patients should be examined, and at which the acutest cases, and certain patients with severe aceidents, might be detained until fit to proceed. There should, further, be a supply of ambulances, in which the sick should be sent from their own homes to the Central House, and in which they might be put upon the railway without change. As it is, we want Parish or Charity Ambulances, in which patients may be conveyed, in the recumbent posture, to the existing Hospitals, so that we may not hear of their dying in cabs on their road; and in such machines five miles would be not more formidable than one. The greatest risk of all would be the bringing the patients down stairs.

As for the out-patient department, that would be unaffected. It is a nuisance as generally managed; but of that we will not speak now.

But, it is said, the dense and indigent population of Southwark will be defrauded by the removal. Poor creatures! they will be too apathetic to go to an office whence they may be sent to a salubrious, out-of-town Hospital! Local vested interests must be respected. You must not relieve the starved and agueish rustics with the funds which are appropriated to the poor of a partieular London district. We do not propose to rob the district poor: quite the contrary; we would give them the pure air which they cannot get now. But as there is a tendency to exaggerate the *local* character of Hospitals, let us give the following illustration, obtained, through the kindness of a friend, from the reeords of St. George's Hospital:—

In that Hospital 294 patients are said to have died during the year 1859, and this number is said to be a fair average of deaths. We may assume that the deaths represent the severest cases. Of the 294, a full fifth, that is, 62 patients, eame from the parish of St. George's, Hanover-square, at or about the middle of which the Hospital is situated, for the parish extends obliquely from Regent-circus, Piccadilly, nearly down to the new Chelsea Bridge. Of the remaining 232 patients, Chelsea contributed 46; Marylebone 24; Paddington 7; Brompton 10; Westminster and St. James's 21; Fulham and Hammersmith 15; Kensington and Notting-hill 20; Soho, Holborn, and City of London 15; suburban part of Surrey, Tooting, Camberwell, Clapham, Battersea, etc., 17; outlying country parts of Middlesex, 22; all England, 21; from the Streets, 5.

Out of the 232 deaths of patients brought from a distance of two miles at the least, 7 were from burns and scalds; 25, fractures and other accidents; 1, poison; 31, urinary disease; 22, stomach, liver, and abdominales; 15 from bronchitis, pneumonia, and lung disease; 21 from heart disease; 19 from disease of brain and nervous system; 31 from consumption and scrofula; 15 from gout, cancer, and dropsy; 28 from the febrile and zymotic class; 7 from womb disease.

These figures show that the benefits of a large Hospital are by no means local; and that more than half of the patients are attracted to it from a distance, and would go to it even were the distance greater. If there were any reason for removing St. George's from its present salubrious site to any other within five miles, scarcely one patient who now goes there would be deterred from going still. It will be for the Governors to show whence the present patients of St. Thomas's come, if that is to be the argument against the removal to a healthy site.

It may be said that the greater distance will be inconvenient to the Physicians and Surgeons. If they were liable to be called upon at any hour of night or day, it certainly would. But, as is well known, the Physicians and Surgeons of most Hospitals are attracted to the West-end of London. They visit their patients three or four times a-week, direct the general treatment, and leave the details to assistants, who, of course, must live near at hand. But, considering that at least half of the staff of St. Thomas's, as of other Hospitals in the East, live at an hour's distance already, it is scarcely credible that the addition of a quarter-of-an-hour's railway journey will be considered when the welfare of the patients is in the other scale.

As for the Medical School, both pupils and their parents will naturally prefer an elevated, open site,—an Hospital situated in a garden of its own, where knowledge may be pursued without the sacrifice of health, and this too within easy reach of town. In our opinion, the advantages of removal to the country are so great, that we are surprised to find considerations of "dignity" (!) brought into the question to support the other side. As it is, the Hospital must go, and the question is, shall it go to a healthy situation or to an unhealthy one?

THE WEEK.

On Tuesday last the grave closed over one of the most accomplished and one of the kindest of Physicians. In the brightest of November days the yellow leaves of autumn fell gently over his coffin upon the Son and the few old friends —(Clark, Churchill, Conolly, and Wells)—who followed through the tranquil and beautiful churchyard of Whitchureh, the village where he died. Some particulars of his long and useful life were recorded in our last number; but we feel as if yet justice has scarcely been done to the memory of so good a man. His activity in the performance of every duty of a man and a citizen, his warm benevolence, his purity and truth, were legible in all his exertions, pursuits, and actions, from his earliest days down to the time when illness gradually over-shadowed him. Perceiving clearly that age was approaching, he withdrew from the occupations of the world, and sought and found a happy refuge in a home of peace and affection, where, with a full conseiousness of the end, and after a long and slow decline, he resigned his soul to that Creator to whose high service he had faithfully devoted the faculties and the opportunities and the strength accorded to him. The biography of sueh a Physician would be most valuable to every young member of the Profession to which he belonged; and we trust it may some day be written by some one of those who knew him best, and who respeeted and loved him in proportion as they knew him more intimately. His life will present an instructive example of a man born with no peculiar advantages of station or fortune, but blessed with a healthy frame of body and mind, which, with a good education, enabled him to undertake every task cheerfully, and to go through each task efficiently; and to exercise greater strength in proportion to the extent and importanee of the duties which devolved upon him as he advanced from studious youth to years of manhood, and through all the busier and more responsible years of a prolonged and honourable life. What was probably his earliest publication, his Thesis on taking his Degree in Edinburgh in 1817, bears strong testimony to his fervent love of knowledge; and one of mueh later date, a Discourse, delivered, indeed,

thirty or forty years afterward, at Chichester, as eloquently records his experience of the value of mental exercise in relation to happiness. His extraordinary industry was in every situation directed to useful objects, to the acquisition of knowledge and its application and diffusion for the relief of human affliction, and the improvement and welfare of those around him, and of mankind. Although himself endowed with that happy temperament which made prudence habitual to him, and secured him from foibles and excesses, from intemperance and from extravagance, he was largely charitable as to the faults of others, and compassionate even to those whom weakness and improvidence had made acquainted with privations and misery. To the good and deserving who had fallen into low estate and misfortune his generosity was boundless; and his bequests of £100 each to the Medical Benevolent Fund and College, in addition to several most kind and handsome legacies to old and faithful servants, were but a continuation after death of his charities when alive. Combined with all his varied power of being valuable as a member of society, and with his clear and vigorous understanding, were deep and faithful affections, a tender sensibility, and an elevated imagination. No philosopher and no poet more profoundly or more warmly appreciated whatever was wonderful or beautiful in nature, or admirable in art, or in any of the productions of human intellect. These words may, perhaps, seem overstrained to those who knew but little of Sir John Forbes, although from one who enjoyed and was honoured by his disinterested friendship for many long years, they are but just tributes of affection. They will be echoed by many whose young aspirations he encouraged, whom he unostentatiously assisted, whose struggling merit he fostered, whose interests he zealously promoted, or who derived precious help from his judicious counsel in various calamities and emergencies incidental to human life and business. To such his loss must for a time appear irreparable; but there is consolation for all his attached friends in the remembrance they will ever cherish of a life so well spent, of thoughts and feelings so well and wisely directed and governed, and of great talents so nobly employed.

An ominous advertisement appears in the daily papers—"St. Giles-in-the-Fields Disused Burial Ground." Notice is given that application will be made to Parliament in the next Session for an Act to transfer and vest in the rector of the parish of St. Giles-in-the-Fields and his successors for ever, as an augmentation of the living of the said parish of St. Giles-in-the-Fields, certain property, lands, and hereditaments, purchased under the Act of the 43rd Geo. III., cap. 20, for the purpose of a cemetery, and situate in the same parish. Sanitary Reformers will do well to keep their eyes on announcements like this; they are the forerunners of excavations and building operations. The bones once solemnly committed to their last resting-place will be rooted out by the pickaxe of the labourer, and houses will be built on the disturbed mephitic soil; and the breathing-space of this huge town curtailed. After St. Giles's, there will follow several other tempting spots. There is a large disused cemetery in the Uxbridge-road; another between Mount-street, and North Audley-street; others in Marylebone; and the tempter will not be slow to insinuate "how much good we shall be able to do with the money if we can but build one row of houses,"—just as if any "good" was worth having that was purchased by the violation of health, decency, and natural religion.

The newspapers of the present week contain but little matter for the Medical chronicler. It affords us some gratification to see that the well-known writer in the *Times* who signs himself "J. O.," and the equally well-known "Hertfordshire Incumbent," express sentiments on the question of Military Discipline, and its connexion with military crimes, quite identical with those which we laid before our readers last week. The fact is admitted that officers may be of feeble temper, or of a sour, puritanical spirit; that, so constituted, they may inflict the most galling and vexatious annoyances on their men; that there is not of necessity any real bond of sympathy between officers and men, for they belong to two different classes; and that the private soldier has no means of redress if he be unjustly punished or worried. Let it be understood that, from the very constitution of human soul and body, the love of life is the very strongest natural feeling. But some soldiers hold their lives in such disgust that they will murder themselves or anyone else to get rid of the burden. Surely, instead of a drum-head court martial and a speedy gallows, it were better to devise some means for getting rid of the thoroughly discontented and unruly, and of making sure that the officers do not provoke the outrages of which they are the victims.

The following extract from the Report on the Sickness and Mortality among Troops in the United Kingdom from 1837 to 1846, presented to Parliament in 1853, gives rather a different view of this important question:—

"It is remarkable that the ratio of deaths from accidents, violence, and suicide is almost the same both among civil and military; thus negativing the conclusions in our previous report as to the greater tendency to suicide in the army. The absence of accurate information at the commencement of these statistical enquiries, gave rise to this error. At that time the relative frequency of suicide in the army and in civil life could only be estimated by comparing the cases among a given number of soldiers and a like number of the civil population at all ages; for, though it was known that the tendency to suicide is less common among females, men of advanced age, and boys, than among males at the military period of life, no data existed to show the extent to which that peculiarity was likely to influence the results.

"There is a difficulty in ascertaining precisely what proportion of these deaths resulted from suicide and accidents respectively. In cases of drowning, for instance, it is frequently impossible to say whether the death was voluntary or otherwise. The same observation however applies equally to military and civilians; indeed from the nature of their profession, particularly in the cavalry, soldiers may be considered more liable to fatal accidents."

The *Geologist*, in its last two numbers, has contained some speculations on the absence of water from the moon. Relying on the fact that certain cavities exist, similar to ocean cavities, the writer assumes that they *did* contain an ocean; and that during the periodic changes in the moon's place, she once came so near the earth that the attraction of the earth drew off her atmosphere and her waters, which falling in what the writer calls "torrential rain," was the cause of the Universal Deluge. Mr. Pengelly, the well-known Devonshire Geologist, recklessly demolishes this hypothesis, and shows that the attraction of the moon for its own waters (if any) must be 550 times greater than that of the earth, and that if they could be abstracted at all, it would be by the sun, and not by the earth. This is an example of pseudo-scientific notions which find their way into respectable journals like the *Geologist*, and then are greedily propagated by the newspapers.

The Metropolitan Association of Medical Officers of Health held an evening meeting at 8, Richmond-terrace, Whitehall, on Saturday evening, the 16th inst., at which the subject for discussion was Van Hecke's System of Ventilation. We have in past numbers made mention of this system, which is

carried on in this country under a patent, by Mr. W. Phipson, C.E. The essence of it is this: that air is driven into the apartment to be ventilated in sufficient quantities, having first of all been warmed and moistened to the desired extent. If air is to be brought into any given enclosed space, it must either be driven in by force from without, or it must be sucked in by force acting within, as is the case with our common fireplaces. We advocate the former plan, on theoretical grounds, because, in the first place, it insures, firstly, that a large quantity of air shall be really introduced; and, secondly, makes it certain that the quality of the air shall be under control. In systems of ventilation by *aspiration*, or by creating a vacuum, as by a common fire, there is always a chance that the air may be sucked in from a source whence it is not desirable to have it. For instance, it has been pointed out by Dr. J. H. Burdon Sanderson and Mr. Lovegrove, that the suction of a kitchen-fire will lift a common bell-trap, if the doors and windows be closed, and introduce a current of gases from the sewers beneath. We would point this out to ventilators as one special reason why the method of propelling air is better than that of drawing it in by aspiration. At the same meeting Mr. Scott exhibited a new kneading apparatus, for supplanting the system of kneading bread by the hands. It appeared to be efficient and cleanly; but the "proof of the pudding," after all, must be applied before the public will decide in its favour. It is alleged by the advocates of this kneading-machine that it enables the baker to make three loaves per sack of flour more than he can by hand kneading. Is this true? If so, is it a fact that three per cent. of flour is habitually wasted by hand kneading and is saved by the new process? Or is it that three per cent. of additional water is combined with the floor, and that the public stomach will be cheated by bulk without substance? Any one who comes forward with a new invention which disturbs a great branch of industry, is bound to substantiate his statements.

The *Saturday Review* is inclined to be complimentary this week to our Profession, although it complains that we are scarcely alive enough to the virtues of foreign mineral waters:—

"There is no doubt that more widely-diffused knowledge of the virtues of the foreign springs is greatly to be desired, both among the English public and English Medical Practitioners. The comparative ignorance of the wonderful powers of these great restoratives which prevails among us appears to arise from two causes,—the great inferiority of the English sources which supply us with our type of medicinal waters, and the great superiority of English Physicians in the art of healing. It is the boast of the English Medical Profession that, though physiology and pathology may be more advanced in other countries, healing, which is the ultimate aim of all physic, is more steadily pursued and more frequently consummated in England than in any other part of Europe. There is very likely to be some truth in this assertion, but no one who has had any experience of foreign Physicians can doubt that their less extensive command of artificial remedial instrumentalities is to be explained, if it exists, by the potent auxiliaries in Nature to which they are in the habit of appealing. A French or German Doctor rarely relies on himself for the treatment of a chronic disease. He trusts his patient, with the utmost confidence, to the 'waters;' and a great part of his Professional knowledge consists in the most minute discrimination of one spring from another, and the clearest appreciation of the malady which each is fitted to relieve. English Physicians are, as yet, insufficiently equipped with this branch of knowledge; and some remarkable mistakes which one or two of them have recently made, by sending invalids of mark and note to the wrong bath, and in some cases too late for benefit, have much discredited them with the members of their Profession on the Continent. Unrivalled as is the hygienic skill of the English Physician, he is not justified in neglecting the powerful means of healing which, imperfectly represented in his own country, are found abroad in the highest perfection. No prescription can bring out of the druggists' drawers a remedy as cunningly mixed as that which Nature has prepared."

We well recollect meeting the late Mr. Hargraves at Tunbridge Wells, who told us that if any of his patients amongst the visitors wanted steel, he prescribed the tincture, and not the water, which sat much less easily on the stomach. It is really not true that mineral waters are better in general than remedies combined by the skill of the Physician and chemist; but it is true that they can be taken under circumstances and in the midst of other hygienic appliances which it would be impossible to procure at home.

While a deadly tempest of yellow fever is now swooping over our West Indian Isles, and while our Medical officers are contending manfully against its frightful onslaughts in our ships of war, it is this day our painful duty to record the death of Mr. John Rogers, Assistant-Surgeon of H.M.S. *Mersey*, a young and gifted Medical officer, who was smitten down at his post, on August 29 last, while endeavouring to alleviate the sufferings of a yellow-fever-stricken ship's company, on board H.M.S. *Racer*.

The following note on Volunteers and their privileges, from Dr. Turner, Surgeon 2nd Battalion Sussex Rifle Volunteers, will be read with great interest by Volunteer Surgeons:—

"Having made a claim of exemption from tax for one horse, as a charger, which was questioned by the Inland Revenue Officer on the ground that I was *not* a Field Officer, I made an application, through the Honorary Secretary of the 6th Sussex Rifle Volunteer Corps, to the War Office, as to my position and status. The following is the reply:—

"'War Office, Nov. 8, 1861.

"'Sir,—With reference to a letter, signed "George Daintrey, Honorary Secretary, 6th Sussex Rifle Volunteer Corps," which has been forwarded to this Office by the Adjutant-General to the Forces, to whom it was addressed, I am directed by Secretary Sir George Lewis to inform you that the Staff-Surgeon of an Administrative Battalion of Rifle Volunteers is entitled to the position and status of a Field Officer.

"'I have the honour to be, Sir,
"'Your obedient Servant,
"'The Officer Commanding "'M. McMurdo.
"'6th Sussex Rifle Volunteer Corps,
"'Petworth.'"

We congratulate Dr. Turner and his brethren on this reply.

A grand hippophagic banquet has lately been held in Algeria, under the auspices of M. de Croix, Veterinary Surgeon to the 1st Mounted Chasseurs. Horseflesh was served in every variety of form, and a young ass, roasted whole, formed a conspicuous *pièce de resistance*. In London the flesh, even of diseased horses, fetches too high a price for it to be used as human food.

We have several times had occasion to notice, in cases of combined murder and suicide, how much more effectually a man cuts his wife's throat than he does his own. The same with drowning. A young man, named Inkpen, agreed with a girl, named Edwards, that they would be drowned together, and for this purpose they tied themselves together with tape and leather strings and jumped into the Surrey Canal. After they had been in the water some time, the tape broke and the woman was drowned, whilst the man saved himself by swimming ashore, "after," it is said, "endeavouring to rescue the deceased,"—for the girl was drowned of course. The coroner's jury found that the poor girl was *felo de se*, and

that the man was an abettor of the murder. We are no great friends of capital punishment, yet think that we should feel happy if this fellow were hanged. It would be no injury to him, for he clearly wanted to get rid of his own life, if his story be true; whereas, if not true, it would be a just punishment for his criminal and cowardly conduct to the poor girl.

Dr. Adams has been appointed Surgeon in Ordinary to the Queen in Ireland. This is another example of the "right man in the right place." There is certainly no other living Irishman who has done more for Surgical Science.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

GERMANY.

Berlin, October 31.

ON URANOPLASTICS.

My letter on "uranoplastics" which appeared in the *Medical Times and Gazette* for July 20, and in which I described a new operative proceeding employed by Professor Langenbeck for the cure of congenital total cleft of the palate, has elicited a reply from Mr. Hulke, which is inserted in your Journal for August 31. In it Mr. Hulke rather satirically remarks upon this "new proceeding," that it had long ago been very successfully practised by English Surgeons, and more particularly by Messrs. Fergusson and Pollock. I may say, in reply, that Professor Langenbeck is sufficiently acquainted with English Medical literature to be able to give to Cæsar that which is due to Cæsar; and if his method had really been previously employed by any other Surgeon, he would have cheerfully acknowledged it. The fact, however, is, that all Surgeons who have used the soft parts of the palate for closing clefts, viz., Messrs. Krimer, Roux, Dieffenbach, Warren, Fergusson, Pollock, and others, have not gone further than separating the *mucous membrane* with which Mr. Hulke seems to have confounded the *periosteum* of the hard palate. These two membranes are, however, very different structures, and every Surgeon may easily satisfy himself that in separating the mucous membrane with cutting instruments, as, for instance, with Warren's and Fergusson's knife, no part of the *periosteum* is detached, and that the numerous prominences and unevennesses of the hard palate impede the action of cutting instruments. Independently of the circumstance that no English Surgeon has ever mentioned the separation of the periosteum for the purpose of uranoplastics, it is very improbable that this operation should ever have been done, because, hitherto, it was generally believed that detaching the periosteum was followed by necrosis of the bone. Professor Langenbeck has been the first to show that the periosteum may, to a large extent, be separated from the bone without necrosis being the consequence of it. Mr. Hulke also states that the gangrene of the flaps, which has deterred so many Surgeons from prosecuting further attempts to close clefts in the hard palate, was favoured by the use of blunt levers and raspatories, by which the tissues were very much more bruised and injured than when they were more cleanly cut away with a sharp knife. This is a strange assertion, as levers and raspatories have never been used for uranoplastics until Professor Langenbeck did so, and this Surgeon has not only accomplished a perfect cure of total cleft, just by means of blunt instruments, but also maintains that the periosteum can *only* be fully detached from the bone by levers and raspatories! My assertion "that a complete closing of this malformation had probably never before been obtained," is not shaken by Mr. Hulke, as he has not reported a cured case, but merely assures us that his patient would no doubt have been cured if he would have had another operation performed upon him.

If your readers care for more information on this interesting and important subject, they will find it in the last volume of M. Langenbeck's "Archiv für Klinische Chirurgie," in which a full account of all the operative trials made before for the cure of this malformation as well as an anatomical description of the hard palate, and of the different forms of cleft to which it is subject, is given, and the new method of uranoplastics, and five cases in which it has been practised, are detailed. The first case is that which I related to you in my previous letter on this subject. The second is that of a woman of 24, in which staphylorraphy and uranoplastics were made in one sitting for a cleft of the alveolar process, and of the whole hard and soft palate; the result being separation of the soft, but a complete union of the hard palate, with new formation of bone. The third was that of a girl of 16, in which there was a double cleft of the hard palate, extending to the alveolar process, and cleft of the soft palate; staphylorraphy and uranoplastics were performed in one sitting; in this case, the cleft had an extent of 6 lines in length, and 4 lines in width, and this deficiency in the hard palate was entirely cured. The last case was that of a female, aged 22, in whom there was a congenital deficiency of the left intermaxillary bone; and a complete cure, with new formation of bone, was the result. Five coloured plates, in which the affections and the instruments used in their cure, are represented, have been added to this paper, which is well suited for translation by the New Sydenham Society.

PROFESSOR VIRCHOW ON THE THEORY OF THE VERTEBRATE SKULL AND PHRENOLOGY.

The theory that the skull is composed of vertebræ, analogous to those of the spine, is not yet quite firmly established in science. Thus, Professor Owen has recently affirmed it for all classes of vertebrate animals, while Professor Huxley is averse to it. It is not generally known that the great German poet, Goëthe, is the originator of this theory, to which he was, after long preparatory studies, led during his journey through Italy in 1790, on examining a sheep's skull, which he found in the Jewish cemetery in Venice. After him it was especially Oken in Germany, and Dumeril, of France, who worked the subject; and lately Professor Virchow has taken it up, and published a work on it, from which I select a few extracts and woodcuts. According to him, the bony capsule which encloses the brain is constructed according to the same fundamental type as the osseous tube which surrounds the spinal cord, the skull being a more highly-perfected structure than the spine, just as the brain is with regard to the spinal cord. This proposition, however, does not hold good for all parts composing the skull, in the ordinary meaning of the word, but only for that portion which directly envelopes the brain. This is the skull proper, and to it are united the bones of the face, which are analogous to the ribs and limbs.

Goethe's theory, that there were six vertebræ of the skull, is no longer tenable, as three of these belong to the face. We can with certainty only prove the existence of three such vertebræ; while it remains doubtful whether a rudimentary fourth, which enters the formation of the nose, is really formed after the type of a vertebra.

These relations are best understood on referring to a longitudinal section of the head of a newly-born infant (Fig. 1),

Fig. 1.

in which the vertebræ of the skull may be more distinctly perceived than in the adult, where such bones as are origi-

nally separated, are grown together, and therefore no longer show the original plan. In the cut No. 1, R is the longitudinal section of the spinal cord, passing into the pons varolii (V), thence into the cerebellum (K), and the cerebrum (G). B is the corpus callosum, by which the hemispheres are united. S is the falx cerebri. 1, 2 and 3 signify the anterior part of the upper spinal vertebræ, and 1*a*, 2*a* and 3*a*, their spinous processes. In the skull the relations are quite analogous. *a* is the body of the occipital vertebra, or the occiput; *b*, the body of the middle vertebra, or the posterior sphenoid; *c*, the body of the anterior vertebra, or the anterior sphenoid. With these bodies there are arches laterally combined, which are not represented in the cut. They unite on the roof of the skull to spinous processes, which are distinguished from those of the vertebral column by their being flat, large, and and originally existing in pairs. *a* is the squama of the occiput, or the spinous process of the occipital vertebra; *b*, the parietal bone, or the spinous process of the middle vertebra, and *c*, the frontal bone, or the spinous process of the anterior vertebra of the skull. Between the two are the fontanelles, originally interarticular membranes. The parts anterior to these belong to the face. Among them there is only one (*n*) of which it is doubtful whether it may be looked upon as a vertebra or not; this part forms the septum narium, and superiorly the ethmoid bone; the upper and lower jaw (*o* and *u*) are, on the contrary, evidently mere accessories to the vertebræ.

From this it may be readily perceived that the premises of phrenologists, which only apply to the roof of the skull, are totally insufficient. For even if we concede that, for every prominence and gyrus of the brain, there is a corresponding prominence of the skull, which is not the case, we should even then be only able to recognise the formation of such parts of the brain as adjoin the roof of the skull, that is, the spinous processes. Physiognomics is of much more importance, since the facial bones immediately adjoin the vertebral bodies of the base of the skull, and are, as regards position, dependent upon the form, size, and position of these vertebræ, so that we are justified in drawing conclusions from the face, and more especially from the profile, upon the formation of the base of the skull, which is otherwise quite inaccessible to observation. It is in this way that the theories of Lavater and Camper may be further developed in a scientific manner. Lavater laid great stress upon the black spaces of the silhouette; this has now been, as it were, dissected by Professor Virchow into a series of tangible parts, which are accessible to direct measurement without having recourse to mere suppositions and arbitrary interpretations.

The study of comparative anatomy is very much facilitated by a close observation of the antique models of art, which were probably imitated from animals. Thus the head of Jupiter is quite similar to that of a lion, and Aristotle says:—"Quibus quadrata et commensurata frons est, magnanimi; refertur ad leones. Quibus crines sublati a fronte ad caput usque, liberales; refertur ad leones."

The study of certain skulls of eminent men also show interesting features. Fig. 2 represents Raphael's skull;

Fig. 2.

Fig. 3 that of Schiller. In the latter we have a lateral view of the bones of the skull—*a* is the squama of the occiput, *b* the parietal bone, *c* the frontal bone—that is, the spinous processes of the three vertebræ of the skull—*d* the ala of the posterior sphenoid—that is, the arch of the second skull vertebra. In Schiller's skull each of the three, but more especially the third vertebra, is beautifully developed. The forehead is very broad, while, in Goethe, this was prominent

Fig. 3.

in the centre. In ordinary persons the distance from the external opening of the ear to the most prominent point of the forehead is only five inches; in Goëthe and Napoleon it was five inches and from six to eight lines. In conclusion I may remark, that M. Pouchet, in his "History of the Natural Sciences During the Middle Ages" (Paris, 1853) has expressed his belief that the learned monk, Albertus Magnus, who was Bishop of Ratisbone in 1260, was already acquainted with the theory of the vertebrate skull; and Mr. Lewes, in his "Life of Goëthe," has rehearsed this opinion; but a close analysis of the works of Albertus shows only that this eminent man believed the vertebral column to be a very important structure, but not that he identified it at all with the skull.

LIVERPOOL.

November 19.

A very sad case, illustrating the way in which a Medical man may, without the least evil intent, lay himself open to serious legal charges, has been recently brought under the notice of the Profession here.

About ten months ago the body of a new-born child was found in a field at Egremont. An inquest was held and a verdict of child-murder was recorded against some person unknown. Circumstances led the police to suspect a woman of notoriously bad character to have been the mother and the murderess of the infant, and Dr. —— was requested by an inspector of police, in the presence of the Coroner, to go to this woman's house and examine her, to see whether she had been recently delivered. Dr —— accordingly went, accompanied by the matron of the local Bridewell, to the suspected person. She at first refused to allow any examination, but then changed her mind, and, just as Dr. —— and the matron were about to leave, she said that she was quite willing to submit to it. The examination was then made, and, according to the written statement of the matron, was conducted with perfect decency, as well as with the free consent of the woman. The result of this investigation proved that she had not been recently delivered, and, therefore, freed her at once from suspicion. Subsequently, however, an action for damages was commenced against Dr. ——, and was set down for trial at Chester Assizes. The defendant and his witnesses were in attendance; but, for some reason or other, the trial was not proceeded with then, but was postponed to the next assizes at Liverpool. Again, the defendant had to secure the attendance of his legal advisers and witnesses, and again the trial did not come off this time through the non-attendance of the plaintiff's side. The case was struck out of the cause-list; but as the plaintiff was not nonsuited, Dr. —— still apprehends that an action may be brought against him. The expense to which the defendant has been put already amounts to about £200. The false position in which he has been placed has most seriously damaged his practice, and his health has suffered from the anxiety and annoyance to which he has been subjected.

Dr. —— seems to have been placed in this unfortunate dilemma. As he was requested by an inspector of police,

in the hearing of the Coroner, to make the examination, he might reasonably believe that it was not an unnecessary or unlawful act which he was called on to perform; so that, had he declined, he might have laid himself open to the imputation of causelessly hindering the course of justice; while it seems, on the other hand, that in acceding to this request, he was laying himself open to the legal proceedings of which he has already had so bitter an experience.

The same kind of examinations, with no higher authorization than that of the Coroner or the police, have, I believe, often been made, and there are probably many of our professional brethren against whom a similar action might be brought with just as good legal grounds as exist for the one above mentioned. If it be illegal to make such an examination, which would, were the woman really guilty, make her, to some extent, criminate herself, it is most important that it should be known to all of us, and also that Coroners should take care not to request a Medical man to do anything that may render him liable to pains and penalties.

Two other medico-legal cases, of recent occurrence, are, I think, of interest. The first a case of poisoning by opium, which occurred at the workhouse, is worth mentioning, on account of the singularity of the circumstances of the administration of the poison. A patient in one of the Surgical wards, suffering from necrosis of the metatarsal bone of the right great toe, accompanied by a good deal of inflammation about the ankle and leg, being unable to sleep, and not having had any opiate ordered for him, one of the other patients said "he would *make* him a couple of pills,"—these words being sworn to by a patient in the next bed. The pills were given and the man went to sleep. The patients and nurses thought there was nothing wrong, and the consequence was that no alarm was given until the time of Mr. Fletcher's visit in the morning, when the man was found profoundly comatose, his pupils contracted almost to pin-point size, his skin bathed in perspiration, and the pulse strong and labouring. The stomach-pump and other remedies were resorted to, but in vain. The contents of the stomach were analysed by Dr. Edwards, and the reactions of morphia and meconic acid were both very marked, thus rendering it probable that crude opium had been taken. The patient who gave the pills to the other admitted that he had done so; but asserted that he had found two pills in a pill-box which he produced. This box, however, had contained only one suppository, which had been used by the person for whom it was ordered, and, from a statement made after the inquest by the wife of the man who gave the pills, it seems that he had got some solid opium from the sailors of the Turkish frigate, who were a long time at the workhouse after their transference from the Southern Hospital. The Coroner's jury returned a verdict of "Manslaughter."

The second, a case of rupture of the uterus, related by Mr. Flynn at the last meeting of the Medical Society, illustrates, not only the fact that this lesion may occur without any long duration of uterine action, but also the free and easy manner in which "Crowner's quest" law is sometimes administered here. The patient was seen in the morning by a midwife (a thoroughly competent person), who found that labour had not commenced. A few hours later she was sent for again, and on going found the woman dead. An inquest was held, prior to which the Coroner's beadle made a preliminary investigation of the circumstances, and satisfied himself that the midwife was a skilful individual, and that the deceased died from "disease of the heart." After the dictum of so high an authority, the Coroner naturally did not consider Medical evidence necessary, and a verdict was given in accordance with—I was going to say the evidence, I should say the beadle's opinion. The friends permitted a post-mortem examination after the inquest, and there was found an extensive laceration of the posterior wall of the uterus. One of the ovaries was diseased, presenting a cyst about the size of an orange.

At the meeting of the Medical Society on October 31, Dr. Skinner read a short paper on "A New Mode of Preparing Medicinal Powders for Administration," by means of a process of "granulation," similar to that which is employed in the manufacture of gunpowder. The powder is mixed with about one-third of its bulk of sugar, and, when necessary, with some tenacious material, such as tragacanth, or some flavouring matter or perfume is added. The powder is moistened, reduced to the condition of an ordinary pill mass, and then rubbed through a somewhat coarse sieve, afterwards through two finer ones, and then dried by gentle heat. Most powders thus prepared may be administered without their taste or smell being perceptible. The specimens shown were prepared by Mr. Banner, of this town.

The question of the therapeutic value of the hypophosphites was discussed at the last meeting of the Medical Society, after the reading of a paper by Mr. Bailey, on their employment in the chronic dyspepsia of needlewomen, and others who were in a low condition. In the cases related considerable benefit had followed the administration of the hypophosphite of potash, in five-grain doses, three times a-day, in combination with the aromatic spirit of ammonia and sulphuric ether. During last session the value of these salts was also under consideration. Mr. John Taylor having found them useful in the class of cases just mentioned, a fair trial was made as to their effect in cases of phthisis, and a number of cases, under the care of Dr. Gee, in the Workhouse Hospital, were reported by Dr. Shearer. The result of these observations, however, was simply negative, the progress of the disease not having been influenced by the medicine.

A very singular case of hernia was described to me by Mr. Steele, in whose practice it occurred. The case was that of an infant, born with an umbilical hernia, in an irreducible condition. The hernial tumour was about the size of a small orange, placed in the substance of the cord, and separating its vessels from each other. On compression, some flatus could be expelled from the hernia, but it was impossible to reduce it. Some difficulty being made by the parents in allowing any operative interference, the hernia remained until the day after the child's birth, when the ordinary operation was performed. The cæcum and part of the colon were found in the sac, and in a state of high inflammation, and almost everywhere adherent to the sac. The child lived till the next day.

The case of chylous urine which I mentioned in my last letter has considerably improved under the use of large doses of gallic acid. The urine is now quite natural in its appearance.

GENERAL CORRESPONDENCE.

THE LATE SIR JOHN FORBES AND THE "CYCLOPÆDIA OF PRACTICAL MEDICINE."

LETTER FROM DR. TWEEDIE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the biographical notice of Sir John Forbes in your last number, it is stated, "It was here (Chichester) that he meditated and launched the 'Cyclopædia of Practical Medicine.'" And again, "A greater work was undertaken when in 1833, conjointly with Dr. Tweedie and Dr. Conolly, he projected the 'Cyclopædia of Practical Medicine,' which was completed in four volumes."

This statement is incorrect, as the idea of bringing out a work comprising the contributions of the most eminent Physicians in this country, on the plan of the French Dictionaries, originated entirely with myself.

In selecting the various contributors, it was my aim to obtain the assistance of such Physicians as had devoted their attention to special departments of Medicine, and as Sir John (then Doctor) Forbes had by translating the immortal work of Laennec, obtained considerable reputation in the domain of thoracic pathology, I wrote to him requesting him to contribute some of the articles on diseases of the chest. His friend Sir James Clark warmly seconded the application, and his ready co-operation was secured. He soon afterwards came to London for the purpose of ascertaining the scope of the articles, and it was then for the first time that I became personally known to him by the introduction of Sir James Clark, who accompanied him. During subsequent interviews, having expressed to me a great desire to share the responsible duties of editor, his services were accepted, and at his suggestion Dr. Conolly was appointed press editor.

If, therefore, there be any merit in suggesting and planning a "Cyclopædia of Practical Medicine," it is due to myself; but I have never hesitated to express my appreciation of the

assistance I derived from the active co-operation of my deceased colleague. I am, &c.

Brook-street, November 20. A. Tweedie.

[We insert this letter, but we have good reason to believe that although Dr. Tweedie has the merit of first suggesting and planning a "Cyclopædia of Practical Medicine," the scheme was carried out mainly by the exertions of Sir John Forbes. He and Dr. Conolly were co-editors with Dr. Tweedie. What *press*-editor may mean we do not understand.—Ed.]

POOR-LAW MEDICAL RELIEF.

Letter from Mr. Richard Griffin.

[To the Editor of the Medical Times and Gazette.]

Sir,—Permit me space to inform the Poor-law Medical officers that the scheme for the administration of Medical relief which I laid before the Select Committee of the House of Commons was published on the 15th of this month in Knight's *Official Advertiser*, and can be procured at that office, 90, Fleet-street (price twopence unstamped) by those gentlemen who desire to see it. The *Official Advertiser* is, I believe, regularly sent to the clerk of each Union; the Guardians, therefore, are by this time fully conversant with the propositions of the Association. I have carefully gone through the six volumes of evidence published by the Select Committee, and find in several of them important remarks on the subject of Medical relief, which it is very desirable to collate and to lay before the Select Committee and other Members of the House of Commons in the form of a pamphlet, but as the Association is entirely without funds, it cannot be done. This I deeply regret, as I believe our cause has never been in a more promising position than at the present moment, and might, by a little judicious management, be brought to a successful issue. I am happy to say that the Council of the British Medical Association have determined to prepare a memorial on the subject of Poor-law Medical Relief for presentation to the Select Committee of the House of Commons; this will doubtless be an important aid to our cause, and a means of assisting the Select Committee in forming a right opinion. I am, &c.

Richard Griffin.

12, Royal-terrace, Weymouth, November 19.

RESUSCITATION AFTER CHLOROFORM ACCIDENTS.

Letter from Mr. Maurice.

[To the Editor of the Medical Times and Gazette.]

Sir,—Several deaths having lately occurred from chloroform, the following may be of some interest to your readers.

Daniel M., aged 14, was placed under chloroform by me, for the removal of a sequestrum from the tibia by Mr. Moxhay. He was a very timid boy, and struggled a good deal at the commencement, but was ultimately fairly under its influence. In the midst of the operation he again began to struggle, and this was quickly followed by stertorous breathing; the heart's action ceased, respiration became imperceptible, the lips blanched, and the limbs flaccid. Recourse was immediately had to artificial respiration, Sylvester's method of raising the arms being adopted, and the face and chest well smacked with a wet towel. After the lapse of two or three minutes he gasped faintly. Galvanism was applied, one pile to the medulla oblongata, the other to the epigastrium. The heart's action was instantly excited, and the boy gradually recovered, brandy-and-water being cautiously administered as the power of swallowing returned.

I am, &c.

Oliver Calley Maurice, House-Surgeon.

Royal Berks Hospital, Reading, Nov. 20.

Dr. W. D. Moore, of Dublin, the learned translator of Schroeder Van der Kolk's works, has been elected a Corresponding Member of the Royal Medical Society of Copenhagen.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 12.

Dr. Babington in the chair.

A communication was made by Dr. R. Lee

ON THE DISCOVERY OF THE ORIGINAL OBSTETRIC INSTRUMENTS OF THE CHAMBERLENS.

The Author commenced his communication by stating that the first notice of the discovery of the Chamberlens which he had met with was contained in Mauriceau's forty-first case, which occurred on August 19, 1670. The patient was a woman who had been four days in labour with distorted pelvis, and had been left to die undelivered, by Mauriceau, when there unexpectedly arrived an English Physician named Chamberlen, who was then in Paris, and who from father to son practised Midwifery in London. Chamberlen undertook to relieve the patient in less than half-a-quarter of an hour, but after labouring upwards of three hours, he was compelled to abandon the case. He returned to London he following day, carrying with him a copy of Mauriceau's "Midwifery," a translation of which into English he published in 1672. The preface contains the only account of the midwifery forceps ever published by the Chamberlens. Where Dr. Hugh Chamberlen, the translator of Mauriceau's work, was born or died, the Author has not been able to ascertain. The Roll of the Royal College of Physicians contains no biographical account of this distinguished Physician; but there is an interesting life of Dr. Hugh Chamberlen, to whom a magnificent marble monument was erected in Westminster Abbey by the Duke of Buckingham, on which there is a Latin inscription, which was written by Bishop Atterbury. At the time the translation of Mauriceau's work appeared, this eminent person was only eight years of age, and could not therefore have been the individual to whom Mauriceau refers in the narrative of the unfortunate case at Paris, and the translator of his work, as has been stated in the Roll of the Royal College of Physicians, but the son. The preface to the translation concludes as follows:—"I will now take leave to offer an apology for not publishing the secret I mention we have, to extract children without hooks where other artists use them—viz., there being my father and two brothers living that practise this art, I cannot esteem it my own to dispose of, nor publish it without injury to them; and I think I have not been unserviceable to my own country, although I do but inform them that the fore-mentioned three persons of our family and myself can serve them in these extremities with greater safety than others." The secret here alluded to, observed Dr. Lee, was the midwifery forceps, which the Chamberlens had invented and perfected; but until the year 1818 no one knew with certainty what the invention was, when Carnardine sent the original obstetric instruments of the Chamberlens to the Medico-Chirurgical Society, with an account of the most extraordinary manner in which they had been discovered at Woodham Mortimer Hall, Essex; (reference was here made to the ninth volume of the *Transactions*.) In the month of July the Author resolved to visit Woodham Mortimer Hall, but before doing so wrote to Dr. Max, of Maldon, requesting that he would have the kindness to communicate any information which he could obtain respecting Dr. Peter Chamberlen and the estate which he had purchased in Essex. Dr. Max complied with this request, and communicated in a letter, which was read to the Society, an interesting account of the mansion and of the closet in which the forceps and other instruments had lain above a century and a half. A description of the tomb was also given, and a copy of the inscription, of which no account had been furnished by Mr. Carnardine, or by the learned Dr. Munk, author of the "Roll of the Royal College of Physicians." On August 12 last, the Author made a pilgrimage to the tomb and the mansion where Dr. Peter Chamberlen lived and died. The tomb requiring renovation, he applied to the Coopers' Company, to whom the estate now belongs, and begged that it might not be allowed to perish,

but without success. Dr. Max employed an artist at Maldon, at the request of the Author, to make correct paintings in oil of the mansion and tomb. These beautiful representations were placed upon the table of the Society.

A paper, by Dr. George Harley, was read, entitled

EXPERIMENTS ON SLOW OR CHRONIC POISONING.

The Author began his elaborate paper by referring to the great importance of the subject of slow or chronic poisoning to the Medical Profession as a whole, and to toxicologists as a class. The symptoms produced by the slow introduction of poison into the system so closely resemble those that are every day met with in natural disease, that unless one's suspicions are accidentally aroused the effects of the one cannot fail to be confounded with those of the other. Many of the anomalous cases which every now and then occur, and embarrass the Practitioner, may be cases of chronic poisoning, if not even of secret murder. It seems a hard accusation to make against civilized society, but Dr. Harley nevertheless believes it to be just, that the cases of poisoning which are discovered form but a small per-centage of those that actually occur. Modern physiology and chemistry have rendered it possible not only to distinguish between the effects of acute poisoning and disease during life, but also to separate and identify in many cases the toxic substance after death. Slow or chronic poisoning has, however, received little or no attention, and may therefore be said to be yet in its infancy. With the view of obtaining some information on this subject, the Author has, during the last two years, carried on a series of experiments on animals with small doses of poisoning, slowly administered. Although he has already investigated the effects of several of the mineral poisons, his remarks were on this occasion limited to the subject of arsenical poison. The Author briefly related several of the experiments he had performed, some of which lasted but twenty-five minutes, while others had extended over a period of eighty days. In the first case, one grain of common arsenic was injected into the jugular vein of a cat. In three minutes convulsions commenced, and in the short space of twenty-five minutes the animal was dead. In the case referred to where the animal lived eighty days, the dose was gradually increased from a quarter of a grain to one grain. In all, forty-nine grains of the poison were taken; and at death the animal presented in a marked degree the effects of chronic poisoning. (The paper was illustrated with numerous water-colour drawings of the different post-mortem appearances observed in the various cases.) It appears from these researches that the effects of arsenic on the digestive canal differ in the acute and chronic form of poisoning. So different, indeed, are the morbid changes presented in the two cases, that the effects of the one could never be adduced from those of the other. The more chronic the action of the poison, the more uniformly are its effects distributed over the digestive canal; whereas, in the acute form of poisoning, the effects of the toxic agent are more especially observed in the stomach. The Author also related some researches he had made regarding the direct action of the poison on the blood, and from which he had ascertained that arsenic has the power of retarding the metamorphosis of the constituents of that fluid, and thereby affecting the tissue-change. The conclusions drawn from the Author's researches are—1st. That arsenic has a specific action on the digestive canal. 2nd. That the action of arsenic on the digestive canal is manifested irrespectively of its mode of administration. 3rd. That the direct contact-action of arsenic with the mucous membrane is slight in comparison to the influence it exerts through the blood. 4th. That the symptoms manifested during life, as well as the morbid changes found after death, differ very materially in the acute and chronic forms of poisoning. 5th. That whereas in the acute form of poisoning the morbid changes are most marked at the cardiac end of the stomach, in the chronic form they are most visible towards the pyloric extremity. 6th. The more gradual the poisoning, the more manifest is the action of the poison on the intestines, and the less visible are its effects on the stomach. 7th. Death may occur from arsenic so rapidly that no apparent structural change has time to occur. 8th. That the immunity from symptoms of poisoning enjoyed by arsenic-eaters most probably arises from their taking the substance in a solid form, and consequently that but a very small portion of what is swallowed enters the circulation. 9th. That the beneficial effects of small doses of arsenic are due to the power it possesses of diminishing tissue-change by its peculiar action on the blood. 10th. That the prejudicial effects of arsenic, when taken in excess, are due to its destroying the property possessed by the constituents of the blood of combining with oxygen, and thereby becoming fitted for the purposes of nutrition.

Dr. Marcet said, if he understood rightly the Author's meaning, his interesting paper showed that small doses of arsenic, continued for a long time, do produce poisonous effects. A question, however, was still open to discussion, namely, How are we to account for the reported innocuous, and even protective effects from the practice of arsenic-eating, which, it is stated, is carried on extensively in Styria? Indeed, we are given to understand, that in Styrian arsenic works the workmen take arsenic, with the view of escaping the poisonous effects of its fumes. In connexion with the subject of Dr. Harley's paper, Dr. Marcet proceeded to offer a few remarks on the poisonous action of iodine. He reminded the Society of the recent discussion among the members of the Académie de Médecine of Paris, as to whether the long-continued administration of preparations of iodine was attended with poisonous effects. On this occasion the late lamented and distinguished Physician, of Geneva, Dr. Rilliet, communicated an elaborate paper to the Académie de Médecine,—which was subsequently enlarged and published under the form of a small volume—stating and giving proofs that iodine, even in very minute doses, may, after a time, produce morbid effects, and he reports the remarkable circumstance of individuals residing in Geneva being affected with symptoms referable to no other cause than poisoning by iodine, when on a visit to the sea-side, where the air contains minute quantities of iodine. Dr. Rilliet suggests, as an explanation of this fact, that the Genevese, living in a country where the air contains no iodine, are peculiarly liable to be affected by it; while those who inhabit countries where the atmosphere is iodised, such as the sea-coast or an island, derive from this very circumstance an immunity against the deleterious action of this substance. Dr. Marcet finally observed that men and animals were not equally affected by poisons—a fact which it was important to bear in mind when experimenting with poisons on animals, with the view of applying the results to mankind. For example, he had kept dogs in a cage or kennel lined with sheet-lead; these animals were invariably seized after a time (about ten days or a fortnight) with the epileptic form of poisoning by lead, and finally died from the poison, although the quantity of lead absorbed, as determined by chemical analysis, was but very small. On placing a layer of straw over the leaden floor of the kennel, the animals remained in perfect health. Again, it is known that horses are much less liable to be affected by many poisonous substances than men, although horses are so delicate that Professor Bernard has never been able to establish a pancreatic fistula in these animals without the operation proving rapidly fatal.

The Author said that in undertaking the experiments related in the paper, his object was not to prove or to disprove any particular views, but to gain information on the subject of slow poisoning. The chief point to which he would advert was that we could not hope to gain information on the subject of slow poisoning by investigating cases of acute poisoning. In reference to experiments on animals, the Author said he did not pretend that poisons would produce exactly the same effects as in man. There was, however, probably greater similarity than was supposed. He thought that as a rule the mineral poisons acted on animals as on man.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, November 6.

Dr. Tyler Smith, President, in the Chair.

A Paper, by Dr. W. Tilbury Fox, was read on

PUERPERAL FEVER.

This paper was intended as an abstract of the history of puerperal fever as it occurred at the General Lying-in Hospital from 1833 to 1858, both inclusive. It appeared from statistical evidence that 180 deaths occurred out of 5833 labours, giving the very high death-rate of 3·085 per cent.

The Author then proceeded to show that from the want of a clear understanding of the nature of puerperal fever, much had been mixed up under the head of the latter which was foreign to the subject; that disease in the puerperic took on an abdominal aspect, and so offered deception; that the history of the childbed fever appeared to be a compound of acute specific diseases — local inflammatory conditions— diseases characterised by severe pain and excess of normal reaction; that after eliminating these, the major part of the cases forming true puerperal fever remained, which were explicable, according to the clinical history of the General Lying-in Hospital, by erysipelas; that in tracing the connexion between erysipelas and puerperal fever, the different epidemics formed links in the chain of gradation and identity; that all the symptoms of intense puerperal fever were produced in cases in which the most decided evidence of erysipelas alone existed, and therefore the assumption of a special peculiar disease *sui generis* (puerperal fever) was unnecessary; that in the case of primiparæ, lacerations to an appreciable extent being the rule, great facility of ingress and onset, so far as the poison of erysipelas is concerned, is their chief source of liability to attack, which latter appears statistically to be true; that with reference to puerperal pyæmia, it merely forms a feature alike common to all acute specific diseases (most especially, however, of erysipelas), being unaccountable for by the doctrine of phlebitis, of thrombosis, of a pyohæmia, and consisting of a general process of abscess, called into action as a special eliminant, when the ordinary agencies fail to expel a virus, and carried on by a relative process between the tissues (connective) and the blood-current, in which thrombosis is common; and lastly, that much of the mortality is preventable. The propositions were supported by cases.

Dr. Tyler Smith said the subject of puerperal fever was the most important which could occupy the attention of the Society. The whole obstetric mortality of England and Wales exceeded 3000 annually. Of this number of deaths more than 1000 women, or nearly three daily, fell victims to puerperal fever; and it was the healthy and vigorous primipara whom it was most prone to attack. The obstetrist could put before him no nobler object than the diminution of this mortality. Unhappily, we could not look to treatment to accomplish this. Under various circumstances, and in different countries, every variety of treatment had been tried and been found wanting. If not curable, it was however preventable. It was not, therefore to treatment, but to prevention, that we must look for the means of dealing with it successfully. If epidemics of puerperal fever were less rife now than in former times,—and at present they rarely occurred, except from the crowding of women in lying-in Hospitals,—it was because we lived under better sanitary conditions, and paid more especial attention to preventive measures. We should surround every lying-in woman, as far as possible, with antiseptic precautions. Nothing, he believed, would tend more to diminish the frequency of puerperal fever than the full recognition of its infectious and contagious nature, in whatever way it first occurred. It would not so often happen if all accoucheurs recognised the fact that erysipelas, typhus, scarlatina, small-pox, Hospital gangrene, putrid sore-throat, diphtheria, the post-mortem and other poisons were excessively prone, if brought near the lying-in woman, to originate puerperal disease. He did not question but that any of the agents which produced zymotic maladies might cause puerperal fever, or that it might arise in individual cases from the retention and putrefaction of portions of placenta or membrane or coagula, or the decomposition of fibrinous clots in the uterine vessels, especially in women who were predisposed by hæmorrhage, albuminuria, or other causes of debility; but contagion and infection, which might to a great extent be recognised and avoided, were its chief and most preventable sources. If all our means, in the way of prevention, were habitually brought into operation, he did not doubt that puerperal fever, instead of being the highest, might become a very moderate cause of obstetric mortality.

Dr. Tanner remarked, that the brief abstract which had been read of Dr. Tilbury Fox's paper could only give a slight idea of the value of this elaborate communication. He thought that the Author had made out a case which was deserving of very careful consideration. Although the treatment of puerperal fever was surrounded by difficulties, yet it was clear that, if there were any truth in Dr. Fox's views, the usual routine plan of bleeding, leeching, and the administration of mercury must be abandoned. Dr. Tanner thought, from his experience, that we effected more good in this fearful disease by carefully treating it rather than by attempting to cure it. In other words, our plan should be somewhat similar to that now adopted in cases of fever, in which the object of the Practitioner is rather to guide the patient through the disorder than to attempt to cut it short by violent measures.

Dr. Graily Hewitt regretted that time would only admit of his making one practical observation on the important subject before the Society. With the remarks of the President as to the great necessity for paying attention to all measures calculated to prevent the occurrence of puerperal fever all must agree. The point to which he wished to direct attention was connected with the same part of the subject, the prophylaxis. It was remarkable in the recorded accounts of puerperal fever how very frequently the disease was observed in cases where copious hæmorrhages during or after delivery had occurred. The connexion between the hæmorrhages and the puerperal fever was to be found, he believed, in the loose, relaxed condition of the uterus present in cases of hæmorrhage, a condition which was extremely favourable to the absorption of morbid matters from without, supposing such to be present. In cases of post-partum hæmorrhage, the uterus often remained imperfectly contracted for some time after labour, and such cases were those which experience had shown to be especially liable to the disease under consideration. The practical conclusion was, that great attention should be bestowed on the condition of the uterus, and every means taken to ensure closure of the vessels by producing perfect contraction of the organ.

Dr. Chowne said he was bold enough to confess that he did not know what puerperal fever really was, and he thought the Profession was uninformed at present of the exact nature of this disorder. There are vast materials for the elucidation of this fearful malady, but they must be investigated and sifted by careful hands. He thought that a committee of the Obstetrical Society could hardly be better occupied than in attempting to investigate this dreadful disorder.

Dr. Tilbury Fox having briefly replied, the meeting adjourned.

EPIDEMIOLOGICAL SOCIETY.

Monday, November 4.

Dr. Babington, President, in the Chair.

Dr. Babington, after a few introductory remarks, stated that he should now have the pleasure of calling the attention of the Society to a *résumé*, drawn up by the Secretary, Dr. McWilliam, of the principal epidemics by which the various quarters of the world had been visited during the year that had passed. Fortunately (he observed) we have no epidemic of any magnitude to record as having occurred either in this country or on the Continent, during the last twelve months. Cholera, which in 1860 and the early months of the present year, was prevailing at St. Petersburg and other ports in the Gulf of Finland, ceased with the return of spring. The same disease also disappeared, about the same time, at Ceuta and other stations in the Empire of Morocco. Typhus fever had raged to a disastrous extent in the beleaguered fortress of Gaëta, and afterwards among the Neapolitan and Sardinian troops at Naples. Typhus had also been prevalent to some extent, but in a mild form, in some of the rural districts of this country. In the North-West provinces of India cholera had swept over extensive tracts of country with appalling force. Preceded by a desolating famine, the pestilence found among the starving population an easy prey to its ravages, and even among the European soldiery the per-centage of deaths to attacks had been almost unprecedentedly great. The West Indies —more especially the island of Cuba—had been visited by yellow fever, in the course of the year, with more than usual violence. Several of Her Majesty's ships had been infected with yellow fever at Havannah, and merchant ships had not only suffered from that disease while in that port, but some of them had lost part of their crews on the passage thence to England and other parts of Europe. Yellow fever had been actually introduced into St. Nazaire, at the

mouth of the Loire, in the month of August last by a ship from the port of Havannah; and within the last week cases of the same disorder were reported on board of a ship at Bordeaux. These facts were justly considered as highly important, and suggestive of the desirability of some authorised declaration of opinion by a Society like the Epidemiological as to the vexed question of the infectious or non-infectious character of this terrible malady which has, on several occasions of late years, extended beyond its usually recognised limits, and attained elevations and latitudes long considered incapable of maintaining its existence. Rear-Admiral Sir Alexander Milne, K.C.B., Commander-in-Chief on the West Indies and North America stations, who is fully aware of the infectious character of yellow fever, and duly appreciates the value of preventive measures, had issued an order to the effect that the ships of the squadron under his command were, unless under urgent necessity, to avoid anchoring in ports where yellow fever was known to be prevailing, and were not to remain in close harbours for more than ten days at a time; and, moreover, that in the event of a ship being invaded by yellow fever, she was at once to proceed to the northward for change of climate. Small-pox had continued to prevail in many parts of England, and in some districts from the previous neglect of vaccination had proved very fatal, more especially in the south-western counties, in parts of Derbyshire and in Northamptonshire. The whole circumstances of the present epidemy of small-pox, which, since its commencement in 1857, had destroyed in England little short of 20,000 persons, had abundantly borne out the allegations as to the neglect and imperfection of vaccination, made by the Small-pox and Vaccination Committee of the Epidemiological Society, in their Report of 1853 and Memorial of 1855. Sanitary Reform had made very satisfactory progress, not only at home, but also in the colonies, and in some foreign countries which had long been remarkable for a disregard of the laws of Health. In the colony of Victoria—Australia; at Alexandria in Egypt, and in the Empire of Brazil, sanitary improvement had considerably advanced, as well by private exertion as by Legislative enactments. The census of the population of Jamaica had been taken in the course of last summer, the previous census having been taken in 1844. There had been an increase during the last seventeen years of 63,000 inhabitants, the population in 1844 having been 377,433, and in 1861, 441,264. Among the population there were 5986 cripples, 1294 blind persons, 1512 persons afflicted with yaws, 776 with leprosy, 650 dumb, and 461 insane; or, altogether, between ten and twelve thousand, permanent and to a large extent incurable, invalids, out of a population much under half-a-million. A representation had been made in the early part of the year by Dr. Armstrong, Deputy Inspector-General in charge of the Royal Naval Hospital at Malta, to Sir W. F. Martin, K.C.B., the Naval Commander-in-Chief in the Mediterranean, submitting that in consequence of the large number of men in the fleet suffering from syphilis, it was desirable that he should use his influence with the Local Government of Malta, to establish a system of periodical examination of the prostitutes of that city. A large number of prostitutes were found diseased, and being sent to the Hospital were cured. The examinations were rigorously continued by the police authorities, and the beneficial influence of the system had been most marked. The average daily number of primary syphilitic cases in Hospital had formerly been from forty to fifty, to say nothing of the number on the sick-list on board the ships with the same disorder, or of the large amount of secondary cases always under treatment, afloat as well as in the Hospital; but during the last three months there had not been a single case of venereal disease that was contracted on the island received into the Naval Hospital. A memorial, with a scheme for making the sickness and mortality among the pauper population of this country available for the purposes of statistical and general inquiry, drawn up by Dr. Milroy, had been forwarded by Dr. Babington to the President of the Poor-law Board. Mr. Villiers, in acknowledging the receipt of the documents in question, stated that he should not fail to submit the scheme and other propositions to the Committee of the House of Commons on Poor-law Relief. Late accounts state that the epizootic disease, known as "Steppe Murrain," or "Pestis Boum," had been making great ravages in the western provinces of Russia. Pleuro-pneumonia has also prevailed in the early part of the year among the cattle in the colony of Victoria—Australia; and measures had been taken against its introduction into the adjacent colony of New South Wales. An epizooty among the hogs of Providence, Rhode Island, had also proved very fatal.

A Paper, by Herbert Miles, Esq., Surgeon, Royal Artillery, Halifax, Nova Scotia, was then read by Dr. McWilliam,

ON AN INDIAN REMEDY FOR SMALL-POX.

Early in the last winter a small coasting vessel landed a portion of her crew at an obscure seaboard village a few miles from Halifax. These persons were sick with small-pox, and the disease soon spread, first among the cottagers, with whom the fishermen mixed, and subsequently among those from the capital, who resorted to the village for purposes of trade. Through the early weeks of spring, rumour constantly asserted that vast numbers of the seafaring population were attacked with the complaint; but it was not until early in March that the large Civil Hospital, of Halifax, by the number of its weekly admissions for variola, began to corroborate rumour, and to authenticate the justice of public anxiety. The disease, in process of time, extended to the troops in the garrison, but the proportion of attacks, to those among the civil population, was singularly small. While certain portions of the inhabitants of Halifax were suffering from the epidemy, alarming accounts reached that place, relative to the terrible ravages of the scourge among the Indians and coloured people generally. Variola is the special plague of the Indians; and when they are invaded by this pestilence, it sweeps them off by scores. Like the fire of the prairies, it passes over their encamping grounds destroying all of human kind in its path. On this occasion the most painful details were given of whole families being carried off by this loathsome disease. After some time, however, it was said that the pestilence had been stayed. One of the Indian race, it was asserted, had come into the disease-stricken camp, possessed of a preparation which had the extraordinary power of curing the kind of cases that had hitherto proved so fatal. This remedy was believed by the Indians to be so efficacious, that if given to them when attacked with small-pox, they looked forward with confidence to a speedy and effectual cure. An old weird Indian woman was the fortunate possessor of the remedy in question. She had always been known as the Doctress of her tribe, and had enjoyed celebrity for many years in consequence of her reputed knowledge of Medicine, and wonderful acquaintance with the herbs and roots of the woods. So well established was her fame among the Indians, that when sick, they resorted to her in preference to the white Doctors, whom they considered to be "No good." Captain Hardy, of the Royal Artillery, an accomplished and intelligent officer, who has been for years among the Indians, says that "the old squaw's remedy had long been known to them as an infallible cure for small-pox," and that "the Indians believe it to be successful in every case." From the information gathered from the Indians, the following observations have been carefully sifted:—
1. In the case of an individual suspected to be under the influence of small-pox, but with no distinct eruption upon him, a large wine-glassful of an infusion of the root of the plant "sarracenia purpurea," or pitcher plant [several specimens of which, including the root, were exhibited on the table] is to be taken. The effect of this dose is to bring out the eruption. After a second and third dose given at intervals of from four to six hours, the pustules subside, apparently losing their vitality. The patient feels better, at the end of each dose, and in the graphic expression of the "micmac" "knows there is a great change within him at once."
2. In a subject already covered with the eruption of small-pox in the early stage, a dose or two will dissipate the pustules, and subdue the febrile symptoms. The urine from being scanty and high-coloured becomes pale and abundant, whilst from the first dose the feelings of the patient assure him that "the medicine is killing the disease." Under the influence of the remedy, in three or four days the prominent symptoms of the constitutional disturbance subside, although as a precautionary measure the sick person is kept in camp until the ninth day. No marks of the eruption (as regards pitting, etc.) have been left in cases examined, if treated by the remedy. 3. With regard to the medicine acting (as is believed by the Indians) in the way of a preventive, in those

exposed to infection, it is curious to note, that in the camps where the remedy has been used, the people keep a weak infusion of the plant prepared, and take a dose occasionally during the day, so as to "keep the antidote in the blood."

A discussion followed the reading of this paper, in which Mr. Marson, Dr. Copland, Dr. Waller Lewis, Dr. Babington, Dr. Morehead, Dr. Milroy, Mr. Radcliffe, Mr. Lord, and Dr. McWilliam took part. All of the speakers concurred in the desirability of requesting Mr. Miles to procure a further supply of the root of the "sarracenia purpurea," with the view of having its anti-varioloid properties tested in this country.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (a).—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted Members of the College at meetings of the Court of Examiners on the 12th, 13th and 15th inst. :—

Adams, Thomas Rutherford, Kilkenny
Anderson, John, Manchester
*Ballenden, John Henry Moffat, Sedgley, near Dudley
Carson, Alexander Tertius, Coleraine
Clarke, Alexander Carson, Coleraine, Co. Londonderry
*Clay, Arthur Hamley, Stamford
Cocker, William Henry, Blackpool, Lancashire
Cocks, Cambridge Cary, Ross, Herefordshire
Colston, Samuel Bowden, Brixham, Devon
Davey, James Samuel Engledue, Bristol
Daniell, John, Sydney, Australia
*Dawson, Richard Henry, Broxholme, Lincolnshire
Dumaine, Louis Ernest, Port of Spain, Trinidad, W. I.
Dyte, David Hyman, London
Forte, Augustus Carmichael, Demerara, W. I.
Fryer, John, Newbigging, Bishopdale, Yorkshire
*Gardner, Edward Barton, Montague-street, Russell-square
Gedney, John, Hull
Gwynn, Edmund, Caterham, Surroy
Haslam, George Herbert, Market-Drayton, Shropshire
Hedley, Edward Anthony, Felton, Northumberland
Hoff, George Framingham, Calcutta
Jones, John Lloyd, Treborth, near Bangor
Jordan, Miles Joseph, Castlebar, Co. Mayo
Lathbury, Thomas Arthur, Birmingham
Lee, Herbert Grove, Thame, Oxfordshire
Marshall, Walter Thomas, Birmingham
Miller, Richard May, Barnstaple, Devon
Moore, Edwin, York
Nickols, Thomas, Leeds
Nutt, Horace, Cold Overton, Leicestershire
Okell, George, Nantwich, Cheshire
*Tanner, Richard Canning Painswick, Gloucestershire
Passmore, Thomas Henry, Instow, North Devon
Prickett, George Benwell, Oxford
Rouse, Lewis Risdon Heysett, Torrington, Devon
Rowe, Thomas Henry, Haverfordwest
Rudge, John Edmund, Westbourne-grove, Bayswater
Sheetz, James, Etawah, Bengal Presidency
Sheppard, William Matthew, Geelong, Australia
Smart, Bath Charles, Balsham, Cambridgeshire
Somerville, James Harmar, Bloxwich, Staffordshire
Spedding, William Alexander, Glastry, Kirkcubbin, Co. Down
Strother, Arthur, Forest-gate, Essex
Tompkins, Charles Payne, Cork
Troy, John Henry, Clarendon-square
Will, Alexander, Melbourne, Australia
Williams, Edward Humphrey, Carnarvon
Williamson, Henry George, Nantwich, Cheshire
Wilson, James, Birmingham

Those gentlemen with an * prefixed to their names are also Licentiates of the Society of Apothecaries.

At the meeting of the Court, held on the 12th inst., Danie O'Connor, of the Royal Naval Hospital, passed his examination as Naval Surgeon. This gentleman had previously been admitted a Member of the College, his diploma bearing date July 4, 1856.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, November 14 :—

Adams, Webster, St. Thomas's Hospital
Bromley, John Bourne, Stourbridge
Carter, Edward Hunt, Billericay, Essex
Dyte, David Hyman, London
Owen, Richard J., Leamington
Walker, Bernard, Sheffield.

(a) This College is the only one which does not send lists of New Members to the Medical Journals.—Hence frequent mistakes, for which the Journals are not responsible.

The following gentlemen also on the same day passed their First Examination :—

Lindop, John Crump, St. Bartholomew's Hospital
Row, William, Guy's Hospital.

APPOINTMENTS.

BRODIE.—Mr. B. C. Brodie, of Balliol Coll., has been approved as one of the Examiners in the first Medical Examination at the University of Oxford.

BULLIN.—Mr. Frederick Bullin has been elected Dentist to the Chester Infirmary.

CREMER.—Robert Cremer, M.R.C.S. Eng., L.S.A. Lond. has been appointed Medical Officer for District No. 6 of the Norwich Union.

DURHAM.—Charles Edward Durham, F.R.C.S. Eng. (Exam.,) has been appointed Assistant-Surgeon to Guy's Hospital.

FRANCIS.—William Bransby Francis, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer for District No. 8 of the Norwich Union.

PATTEN.—Charles Arthur Patten, M.R.C.S. Eng., has been appointed Assistant-Surgeon to the Convict Prison at Portsmouth.

ROLLESTON.—Dr. Rolleston, of Pembroke College, has been approved as one of the Examiners in the first Medical Examination, at the University of Oxford.

DATE.—William Date, M.R.C.S. Eng., L.S.A. Lond., has been appointed Resident Surgeon to the Birmingham and Midland Counties Lying in Hospital and Dispensary for Diseases of Women and Children.

ELLIOTT.—Mr. Charles Elliott has been appointed Senior Assistant Accoucheur to Steevens's Hospital, Dublin.

JENNINGS.—Weasley Bond Jennings, B.A. Trin. Col. Dub., L.K.Q.C.P. Irel., L.R.C.L. Irel., has been elected Lecturer on Obstetric Medicine at the Richmond Hospital School, Dublin.

MACHIN.—E. S. Machin, M.R.C.S. Eng. has been appointed Resident Surgeon to the Birmingham and Midland Counties Lying-in-Hospital and Dispensary for Diseases of Women and Children.

MALTBY.—Dr. J. W. Maltby has been appointed Physician to the Durham County Hospital, *vice* Dr. T. L. Watkin resigned.

NIVEN.—Joseph Niven, L.R.C.S. Edin., has been appointed Resident Surgeon to the Birmingham and Midland Counties Lying-in-Hospital and Dispensary for Diseases of Women and Children.

SMITH.—Mr. H. J. C. Smith, of Balliol Coll., Oxford, has been approved as one of the Examiners in the first Medical Examination.

DEATHS.

BUTLER.—November 4, Jonathan Butler, of Sunderland, late of Hasford, near Nottingham, L.S.A. Lond., aged 52.

HARRIES.—November 12, George James Harries, of 38, Clifton-road, St. John's-wood, M.D. St. And., M.R.C.S. Eng., aged 25.

JOHNSON.—November 7, James Johnson, of Corbridge, Northumberland, L.R.C.S. Edin., aged 40.

MADDEN.—November 6, at the County Monaghan Infirmary, William Tertius Madden, the Resident Apothecary and Registrar, eldest son of William Madden, of St. James's-street, Dublin, M.D. Glasg., L.A.H. Dub., aged 28.

ORMSBY.—October 31, at Barna, Ireland, Dr. Phillip Ormsby, of Tuam, formerly Resident Physician of the Arran Dispensary.

SHEPPARD.—November 3, at Saintfield, Ireland, Dr. W. E. Sheppard, aged 24.

SMITH.—September 18, at Fyzabad, Oude, George Smith, Assistant Surgeon, 34th regiment (November 22, 1858.)

SAYER.—November 15, Augustin Sayer, of Portman square, F.R.C.P. Lond., aged 71.

THOMPSON.—November 14, at Bongate-hall, John Thompson, aged 54

TOMKIN.—November 17, Thomas Tomkin, of Witham Essex, M.D. Univ. St. And, M.R.C.S. Eng., L.R.C.S. Edin., aged 74.

WALL.—September 14, at Mhow, Central India, George Parsons Wall, Assistant-Surgeon of the 64th regiment (October 10, 1857.)

APOTHECARIES' HALL.—BOTANICAL PRIZES.—The competition for the medals in Botany annually given by the Company of Apothecaries has resulted as follows :—Gold medal, Henry Trimen, King's College ; silver medal, J. W. Hicks, St. Thomas's Hospital ; silver medal, W. Carter, Charing-cross Hospital.

THE ROYAL HUMANE SOCIETY.—It appears from the returns of the Receiving-house, that the number of bathers in the Serpentine from the commencement of the year to the 3rd inst. was 71,356 in the mornings and 296,943 in the evenings. Of this number 41 were in danger of losing their lives, but were rescued by the vigilance of the officers of the Royal Humane Society. The number of attempted suicides was eight, of whom five were rescued, and the remainder were not discovered in time to be saved. Out of the 41, was one man who, while swimming across the Serpentine, was seized by a large bull-terrier by the ear and pulled under the water, the dog biting the ear off.

REMEDIAL EFFECTS OF THE TURKISH BATH.—Mr. Bolton, House Surgeon to the Newcastle Infirmary, has the

following report on the effects of the Turkish Bath during the past year :—"Sir John Fife, in November, 1857, drew the attention of the Newcastle and Gateshead Pathological Society to the subject; shortly afterwards the House Committee sanctioned the construction of a bath in the Infirmary, and in July following it was in thorough working order. The class of cases first submitted to its influence were of a rheumatic character, both acute and chronic lumbago, neuralgia, sciatica, and gout; and with such beneficial results, that in the course of a few weeks the bath had become most popular, and rheumatic cripples were being brought from all quarters; some with their joints much swollen and suffering a martyrdom, were conveyed helplessly down to the bath into a species of Elysium, where ache and pain vanished as by magic. One of the worst cases of rheumatic gout that I have seen was admitted into the Hospital in October 1860; he was a baker aged forty-six; since 1855 he had suffered from the affection in his joints, and had been under treatment here and in another Hospital, without gaining any relief; his elbows, wrists, fingers, knees, and ankles were much enlarged and stiffened, so as to cripple his every action. I quote his own words, 'For the last two years I had been getting much worse; during the whole of this period I had very little refreshing sleep, and had continued gnawing and acute pains in all my affected parts. I have experienced much benefit from every bath which I have taken, and can at the present time (February 1861), use my hands and arms with much freedom; previously I could not stand alone, now I am able to walk without any assistance.' Equally satisfactory results have followed in cases of dropsy, the profuse perspirations affording marked relief. In catarrh, influenza, and the many affections of the throat and air passages, diarrhœa, and dysentery, the genial atmosphere of the bath, at a temperature of 130° F., exerts an influence far surpassing the benefit to be obtained by medicine. As a simple illustration, I may mention the case of a gentleman who had travelled from the south, a journey of many hours; he was labouring under a severe cold, and had almost lost his voice; he was easily persuaded to enter the bath, and in the space of a single hour, had completely recovered his vocal powers, and was enabled to attend a ball the same evening The power the bath unquestionably exercises in equalising the circulation, renders it peculiarly useful in all cases of congestion, or stagnation of the blood, and obstructions of the viscera; hence the averting of the ague fit which I have frequently witnessed, the dispersion of hæmorrhoidal and varicose conditions, the natural (tonic) cure of hernia, and the relief of stomach and liver affections. In scrofula affecting the integuments, glands, and joints, incipient phthisis, and other conditions attended by wasting, the tonic influence of the bath is speedily evinced by an increase of appetite, flesh, and general condition; and, moreover, a disposition to assimilate a larger quantity of cod liver oil, the acknowledged remedy for scrofula; while at the same time, the patient himself voluntarily casts off the damp flannel that has chilled his breast for many a day, and pins his faith to cotton and pure air."

Professor Virchow as an Orator.—It is well known that Professor Virchow is an ardent politician on the Liberal side, and he was somewhat seriously compromised by the troublous events of 1848. At the recent meeting of German Naturalists and Physicians at Spires (which, indeed, was converted into a demonstration in favour of German unity), his address on the influence of teaching natural science on the education of the people, created a wonderful sensation during its delivery, and was followed in the evening by a torchlight ovation. In this address he forcibly dwelt upon the necessity of furnishing a liberal education, disentangled from all influences opposed to a scientific spirit and a rational and experimental method; and he pointed out the importance of combining exercises tending to bodily development, consentaneously with attempts at mental culture, instancing the successful results attained in England by such combination. "His success," says M. Lereboullet, of Strasburg, who was one of the auditors, "was immense, and well merited; for, besides his other qualities, Virchow possesses most remarkable oratorical talents. His diction is pure, elegant, flowing, and lucid; and without any attempt at effect, or display of eloquence, he persuades and carries his audience away with him. He is said to be on the point of entering the Prussian Parliament, and doubtless great success there awaits him. It is to be feared, however, that he will become much, if not entirely, absorbed in politics, and that Medical Science will thus lose the services of one of its most illustrious representatives."

The French Medical Association.—At the Third Annual Meeting of this body, held under the presidency of M. Rayer, it was announced that its members now numbered 4316, there being 67 local Societies, representing 57 departments affiliated with it. Its receipts last year amounted to 100,451 francs, and its expenses to 31,103 francs, its reserve fund being 160,757 francs. The objects of the Association are assisting distressed members, their widows, or orphans, the watching over Professional interests and relations, and the prosecution of illegal Practitioners. During the last year it obtained 49 convictions. Quackery and illegal practice seem just as rife in France as in England, and that notwithstanding in the former country stringent laws, capable of being enforced, which is not the case with us, exist. From all the local Societies great complaints have been made of the interference of the priesthood and the religious establishments with the functions of Medical Practitioners.

A Tardy Rectification.—The German Association of Naturalists and Physicians, now so imposing a body, was, when set on foot at Leipsic in 1822 by Oken and a few other choice spirits, viewed with such ill-favour by the German sovereigns, that three of its founders residing in Bohemia, and, therefore, being under Austrian rule, did not dare attach their names to the document which constituted the rules of the Association. Two of these *savants* are dead, but Professor Purkinje, the third, still lives, and being now naturally anxious to have his name recorded as one of the founders of so important an Association, he has applied, and has been allowed to have it inserted at the bottom of the original protocol. Times are, indeed, changed, for the Association is to meet next year at Carlsbad (carried by 116 votes to 104 for Dresden), with the express sanction of the Austrian Government.

Injection and Irrigation of the Bladder.—In performing this operation, Dr. Slade finds it conduce much to the comfort of the patient "if, instead of fixing the nozzle of the syringe directly upon the catheter itself, we connect the two instruments by means of an elastic tube of caoutchouc or gutta percha. In this way no shock can be conveyed from the hand directing the syringe to the bladder, often excessively sensitive. A tube of similar material, of any desired length, may be also attached to the other tube of the double catheter, so that the fluid may be easily conveyed to a vessel placed for its reception without danger of wetting the patient. The vulcanised caoutchouc bottle, similar to that of the ordinary enema apparatus, may often be advantageously substituted for the syringe, because it can be worked with one hand, leaving the other free for adjusting the catheter," etc. When the catheter gives great pain, in consequence of the sensitiveness of the urethra, it should be prefaced by the gradual employment of the wax bougie, introducing only as much of this at a time as can be easily borne.—*Boston Journal*, vol. lxiv. p. 538.

Mercurial Suppositories.—At the meeting of the Pathological Society, on Tuesday last, during a discussion on Cases of Syphilitic Deposits in Internal Organs, brought before the Society by Dr. Murchison, a rather novel plan of treatment in cases of constitutional syphilis was mentioned by Dr. O'Connor. It consists in the use every night, or oftener, of a suppository, made of mercurial ointment. Dr. O'Connor stated that for some years back he has been in the habit of using mercury in this way, where its continued use is found necessary, so as to produce a constitutional effect. The advantages, he states, this plan possesses over the other modes of using mercury, are, that it is more readily taken up into the system; it does not produce irritability of the mucous membrane of the stomach and bowels, as is frequently the case when administered by the mouth; and the disagreeableness of mercurial inunction is avoided. Dr. O'Connor stated that he has now under his care, at the Royal Free Hospital, among the in-patients, five cases of constitutional syphilis, affecting internal organs, in which this plan of treatment has proved successful.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 16, 1861.

BIRTHS.

Births of Boys, 876; Girls, 898; Total, 1774.
Average of 10 corresponding weeks, 1851–60, 1616·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	673	615	1288
Average of the ten years 1851-60	606·9	569 6	1176·5
Average corrected to increased population..	..	..	1294
Deaths of people above 90	..	2	2
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	2	26	5	9	9	4
North ..	618,201	..	..	20	4	8	8	3
Central ..	378,058	..	3	22	1	10	16	..
East	571,129	2	..	13	2	14	16	7
South ..	773,160	1	1	20	13	13	13	6
Total.. ..	2,803,921	3	6	101	25	54	62	19

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 356 in.
Mean temperature	39·7
Highest point of thermometer	50·8
Lowest point of thermometer	25·5
Mean dew-point temperature	36·1
General direction of wind	Variable.
Whole amount of rain in the week	2·51 in.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Letter from Mr. Evans in our next.

A Constant Reader.—The "British Medical Fund" was founded on excellent principles, but did not succeed. We know of no Society "exclusively adapted for the relief of Medical men during sickness."

Mr. Armstrong Todd's Cases of Lithotomy shall appear next week, if possible.

Dr. Leared's Paper on Acupuncture shall appear next week.

Mr. Creighton.—It entirely depends upon what is meant by "commencing studies." The Council understand that commencement on Lectures at a Medical School is the commencement of Professional Education.

Carbolic Acid.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having read about the Crude Carbolic Acid in your paper as a disinfectant, I wrote to a chemist in London for some. In answer he informed me that the smallest quantity sold was a puncheon; can somebody inform me where I can get a small quantity (viz. a gallon).

I am, &c. Pearse.

Royal College of Surgeons in Ireland.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am directed to state that Dr. Jameson is President of this College, and not Dr. Adams, who has been appointed Surgeon to the Queen. You will please, therefore, have the announcement corrected.

I am, &c.
Dublin, November 18. John Brennen, Registrar.

Curtis's Ergot.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Why has Messrs. Curtis and Co.'s useful preparation of orgot been allowed to be advertised weekly for two years under a name grammatically incorrect?

Probably because no one has thought it worth a penny and ten minutes to draw attention to it. I am, &c.
Rugeley. D. Henry Monckton, M.D.

Podophyllin.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your reply to your correspondent "C. T." you state that you have given podophyllin in doses of one grain to children.

Since podophyllin was first brought under the notice of the Profession, I have repeatedly prescribed it in doses of one quarter and one sixth of a grain for adults, generally with satisfactory effect. The great advantage of podophyllin in one sense, is that in the small dose just named it makes up into a minute pill which can be swallowed by the most fastidious or recalcitrant of fauces; while in another, it obviates in many instances the demand for a mercurial "alterative." I have usually combined the podophyllin with half a grain or a grain of extract of hop. I am, &c.
T. W. N.

[We and our Correspondent have given two different things—we spoke of the podophyllin of commerce—or resin of podophyllum as it is called—which is often confounded with the pure resinoid active principle of the drug—a far more powerful medicine.]

Dr. R. Lee's Clinical Midwifery.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In his instructive contributions on "Clinical Midwifery" which appeared in your Journal on the 9th inst., Dr. R. Lee states, (Case 741,) "I would not allow chloroform to be given to make her insensible, *because* consciousness is a safeguard to patients in *all* the operations of midwifery."

Now, as I do not like the use of chloroform in midwifery practice, I should much like to know from so eminent an authority as Dr. Lee, his reason *why* "consciousness is a safeguard in all the operations of midwifery." An answer will therefore greatly oblige. I am, &c. J. J. C.

The New Pharmacopœia.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The Medical Profession are given to understand that next year they are to be presented with a New Pharmacopœia, of course they are waiting with expectation to see if the production be of such a kind as to do honour to the compilers, and benefit the prescriber and compounder of medicinal substances. It is to be hoped that it will contain a posological table, by which addition mistakes will be fewer in number, and if made, be in consequence of the carelessness or rashness of those who prescribe. Surely, in the advanced state of Medicine, such an addition is not only reasonable but necessary. I am, &c.
London, November 19. F. C. S.

The Cyclopædia of Surgery.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Would you kindly permit me through the medium of your columns, to return my sincere thanks to the Profession, to yourself, and to the Press generally, for the many expressions of sympathy I have received on the occasion of the destruction by fire of my great work "The Cyclopædia of Surgery," and at the same time to state, that arrangements, which will be duly announced in advertisements, are now nearly completed for the sale of the 500 copies that have been spared from the disaster. I am, &c.
London, November 18. William B. Costello.

COMMUNICATIONS have been received from:—
Dr. Balfour; Dr. Tweedie; Dr. Chambers; Dr. Thorowgood; Mr. W. Adams; Dr. Hillier; Dr. Gray, Oxford; Dr. Wallace; Dr. Leared; Dr. Cotton; Mr. Nunn; Mr. Griffin; Mr. Sadler; Mr. Dunlop; Mr. Cousins; Dr. Devenish; Mr. Bremridge; Mr. Partridge; Mr. Wheatley; Mr. Berkeley; Mr. S. Jackson; Mr. Taylor; Mr. A. Smith; Mr. Dawson; Mr. Fletcher; Mr. Mudie; Mr. Lane; Mr. Brandreth; Mr. Stevens; and Mr. Curtis.

APPOINTMENTS FOR THE WEEK.

November 23. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Guy's Physical Society, 7 p.m. Mr. Lamb "On Rheumatism."

25. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Medical Society of London 8½ p.m. Lettsomian Lectures.—Dr. F. W. Mackenzie, "Physiological Researches into [the Origin of Phlegmasia Dolens:] Connected with the Pathology of Phlegmasia Dolens."

26. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Medical and Chirurgical Society, 8½ p.m. Mr. R. Barwell "On the Evils of Tenotomy, and a New Method of Curing Deformities of the Foot." Mr. T. Nunneley, of Leeds, "On Congenital Malformation of the Eyes in Three Children."

27. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Dr. Braxton Hicks "On the New Mode of Turning."

Society of Arts, 8 p.m. Meeting.

28. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

29. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday next:—

By Mr. Fergusson—Removal of Necrosed Bone from Tibia (two cases); Removal of Necrosed Bone from Humerus.

ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT

The Grosvenor Place School of Medicine,

DURING THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.,

Surgeon to the Royal Orthopædic and the Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital, &c.

LECTURE IV. *(Continued.)*

Now, let us pass on to the consideration of the

MORBID ANATOMY OF LATERAL CURVATURE.

The normal curvatures of the spinal column in the antero-posterior direction, I have already shown to depend upon the relative thicknesses of the intervertebral cartilages and the bones in the different regions of the spine; and there can be no doubt that the abnormal curvatures in the lateral or other directions, when not connected with disease, also depend upon alterations in the relative thickness of the intervertebral cartilages and the bodies of the vertebræ at parts corresponding to the curvatures; but in the abnormal conditions, these deviations are also associated with changes of direction in the articular facets of the oblique articulating processes. How these changes are brought about, it will be for us to inquire, but I am now anxious to insist upon the fact that such structural changes must exist in every case of lateral curvature of the spine, however slight, and that I do not admit the existence of lateral curvature of the spine as a merely functional condition.

Let us therefore consider what are the precise deviations in direction assumed by the vertebræ, and the nature of the structural changes affecting the bodies of the vertebræ, the intervertebral cartilages, and the oblique articulating processes in the so-called lateral curvature.

GENERAL DIRECTION AND FORM ASSUMED BY THE SPINAL COLUMN IN THE SO-CALLED LATERAL CURVATURE.

In the description just given of the *external characters* of lateral curvature in its different forms, I have already indicated the fact to which I would now more especially direct your attention, viz., that in the so-called lateral curvature, the spinal column does not yield in a purely lateral direction, as a flexible column would bend, but presents the appearance of a spiral twist, owing to the bodies of the vertebræ turning round in a direction of *horizontal rotation*, so that their anterior surfaces are directed laterally along the convexity of the curvature. In a severe case this rotation commonly extends to a quarter of a circle in the centre of the curve, and diminishes from this point to the two extremities, so that the vertebræ unequally turned upon themselves, cease to correspond in their natural relations to each other as well described by Bouvier. In a case of extreme severity, this rotation will sometimes extend even to half a circle, so that in the centre of the curve the anterior surfaces of the bodies of the vertebræ have a directly lateral aspect; in such cases the angles of the ribs project posteriorly, and are bent sharply upon themselves, extreme deformity of the chest of course resulting.

This deviation of the bodies of the vertebræ does not necessarily correspond to, nor is it indicated by, any lateral deviation of the apices of the spinous processes. It may exist to a considerable extent—the rotation extending to a quarter of a circle in the centre of the curve—without any, or at least with very slight, lateral deviation of the apices of the spinous processes, as shown by the preparation from which Figs. 5, 6, and 7 have been taken. This specimen I removed in accordance with a special permission given in a note left by the deceased, from the body of a distinguished member of our Profession, the late Dr. Gideon Mantell, who died November 10, 1852, aged 62, and whose name is so well known in connexion with his discoveries in geological science. (a)

This case, together with the appearances presented on the post-mortem examination, and the dissection of the specimen, accompanied by lithograph plates, from which the present wood-cuts are taken, was published jointly by Dr. Hodgkin and myself in the *Transactions* of the Medico-Chirurgical Society, vol. xxxvii. 1854. After describing the parts removed, I observed:—"The fact of the greatest practical importance which this specimen illustrates and clearly proves, is one which I believe has not hitherto been described, viz., that a very severe degree of lateral curvature of the spine, with transverse rotation of the bodies of the vertebræ, accompanied with lateral absorption of the bones and intervertebral cartilages to a considerable extent, and attended with all the distressing symptoms of the most aggravated form of this affection, may exist, with only a very slight lateral deviation of the apices of the spinous processes; in short, that the severest degree of deformity of the spine may exist internally, without the usual indications in respect of the deviation of the spinous processes externally."

FIG. 5. FIG. 6.

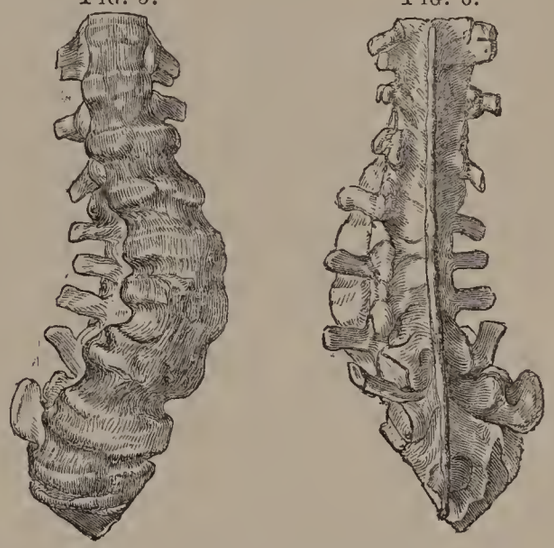

Fig. 5.—Lateral Curvature of the Spine in the lumbar region with rotation of the bodies of the vertebræ—severe internal curvature.

Fig. 6.—Posterior view of the same, exhibiting very slight lateral deviation of the apices of the spinous processes—very slight external curvature.

The importance of these facts in a diagnostic point of view, in especial reference to the history of this case, is then described, and will be again adverted to when the diagnosis of lateral curvature is discussed. Practically it is of great importance to bear in mind that we may have a very large internal curvature of the spine without any lateral deviation of the apices of the spinous processes; the slight deviation in the spinous processes seen in the specimen we are now examining was not perceptible in the body, and is easily removed by pressure. This specimen probably exhibits the maximum of internal curvature with the minimum of external deviation; but essentially, I believe, it very accurately demonstrates the series of changes which occur in all cases of the so-called lateral curvature. In all the specimens preserved in the different museums in London which I have examined, I have found that the internal curvature, *i. e.* the curvature of the bodies of the vertebræ, is always much greater than the external curvature, *i. e.* the curvature of the apices of the spinous processes. There can be no doubt that this is the general rule, and so constant does it appear, that I have not yet met with any exception to it.

If it be rare to find the extreme degree of internal curvature coexisting with an absence of external curvature, as in the case above described, it is undoubtedly true that internal curvature very frequently exists to a slight extent without any external curvature, or lateral deviation of the apices of the

(a) A brief memoir of Dr. Mantell, and a detailed account of his symptoms referable to the spinal affection during his protracted illness was written by my friend Dr. Hodgkin, from notes entered by Dr. Mantell in his diary, and accompanied the account of the post-mortem appearances written by myself, in the paper sent to the Royal Medico-Chirurgical Society, but only an inaccurate abbreviation of Dr. Hodgkin's account was published in the *Transactions* of the Society. The original MS. was destroyed by the Society, and as Dr. Hodgkin had not preserved a copy, many details of this very interesting case are now lost to science.

spinous processes; and the class of cases in which this condition will be found is where a prominence, or a *growing out*, as it is called, of one shoulder is said to exist without any spinal curvature. Such cases are frequently the cause of great anxiety to parents, but are dismissed by Surgeons with the comforting assurance *that there is no curvature of the spine*, whereas, the prominence of the shoulder, *i. e.* the posterior projection of the scapula and the angles of the ribs, might most certainly be relied upon as indicating the existence of internal curvature, or lateral deviation of the bodies of the vertebræ. The prominence or *growing out* of the shoulder ought therefore to be regarded as indicating the existence of internal curvature of the spine, rather than an unimportant external appearance depending, as it is generally said, upon enlargement of the muscles caused by excessive use of the right arm.

A little consideration, and the examination of specimens preserved in Museums, will convince you that the spiral twist which the spine undergoes in lateral curvature, and which is due essentially to a *horizontal rotation* movement of the bodies of the vertebræ, must necessarily produce a *posterior projection of the angles of the ribs*, on the side of the convexity of the curve, in the dorsal region; and a *posterior projection of the transverse processes* on the side of the convexity of the curve, in the lumbar region, in a degree proportionate to the extent of deviation of the bodies of the vertebræ; whilst in the concavity of the curve, the angles of the ribs in the dorsal, and the transverse processes in the lumbar region, are depressed or sunk inwards to a corresponding extent. And as I have already shown that the lateral deviation of the apices of the spinous processes bears no definite or constant relation to the lateral deviation of the bodies of the vertebræ—that an extreme degree of internal curvature may exist without any lateral deviation of the spinous processes, and that, as an invariable rule, the internal curvature exists to a much greater extent than the external curvature—it follows that the posterior projection of the angles of the ribs in the dorsal region, and of the transverse processes in the lumbar region, may be more certainly relied upon than any condition of the spinous processes, as indicating the existence of internal curvature, or lateral deviation of the bodies of the vertebræ.

Diminution in Height of the Spinal Column.—When lateral deviation of the spinous processes takes place—coexisting as it necessarily does, though not to a proportionable extent, with horizontal rotation of the bodies of the vertebræ—we have in addition to the posterior projection of the angles of the ribs in the dorsal region, and of the transverse processes in the lumbar region, a positive loss in height of the spinal column, proportionate to the extent of the lateral deviation; so that the general alteration which takes place in the conformation of the chest in severe cases of lateral curvature, depends upon the combined influence of horizontal rotation of the bodies of the vertebræ, and lateral flexion of the spinal column.

In addition to the spiral twist, and the diminution in height from lateral deviation, I will now direct your attention to another peculiarity in the form assumed by the spinal column in the so-called lateral curvature, simultaneously with the other deviations, viz. :—

The Obliteration of the Natural Curves in the Antero-Posterior Direction.— In cases of double curvature of a moderate degree of severity, when unaccompanied by a stoop or falling forwards of the head from a curvature in the upper dorsal region, we may generally observe a flattening, and in some instances a positive depression, instead of the natural convexity of the middle dorsal region. To this I have previously alluded, when describing the external appearances in cases of double curvature, as one of the most unfavourable indications; there can be no doubt that it depends upon rotation of the bodies of the vertebræ, also indicated in these cases by the altered relations of the angles of the ribs, and therefore it is a certain and reliable evidence of the existence of internal curvature of the spine, necessarily accompanied by certain structural changes, even though there may be no lateral deviation, or, as more frequently occurs, a comparatively slight deviation of the apices of the spinous processes. In the more severe cases of curvature with conspicuous external deformity a careful examination will show that the prominence on the side of the convexity essentially depends upon the posterior projection of the angles of the ribs, and even in these cases there is frequently no posterior projection of the spinous processes. In some cases, however, especially in what are called *large single curves*, accompanied by a stoop, the spinous processes project posteriorly in the general yielding of the spinal column.

In the so-called lateral curvature in the lumbar region, the normal curve in the antero-posterior direction is also frequently obliterated, this portion of the spine appearing in profile view to be remarkably straight.

In articulated skeletons exhibiting spinal curvature, and in dried specimens preserved in museums, this obliteration of the natural curves of the spine in the antero-posterior direction may be traced not only in spinous processes, but in the outline formed by the bodies of the vertebræ when viewed in profile. Sometimes the natural curvatures are even reversed, and this was remarkably conspicuous in the specimens from which Figs. 5, 6, and 7 were taken. In my description of this specimen in the Medical and Chirurgical *Transactions*, I observed, "viewed in profile, or from its lateral aspect, the natural curve of the spine in the lumbar region is seen to be reversed; and, instead of presenting a convexity forwards, the three upper lumbar vertebræ, together with the twelfth dorsal, present anteriorly a concave outline. This is not produced by any absorption or destruction of the bodies of the vertebræ anteriorly, but is evidently caused by the very remarkable degree of rotation above described; by which the natural anterior convexity in this region is made to assume a lateral position, as if the spinal column had been laterally twisted on its vertical axis, the centre of motion being fixed at the apices of the spinous processes" (b).

The general effect of this obliteration of the normal curves in the antero-posterior direction is to produce externally the appearance of a straightening of the spine as far as the profile view of the apices of the spinous processes is concerned; and in examining cases of spinal curvature we may very frequently notice this condition.

The description which I have now given you of the general form assumed by the spinal column in the so-called lateral curvature, has no great claims to novelty or originality, since the same appearances have been described, with more or less accuracy, by several writers; but the existence of internal without any external curvature, or lateral deviation of the apices of the spinous processes, either in severe cases such as that which I have described and illustrated; or as a constant pathological condition in slight cases, and the means of detecting this deviation, have not been previously described so far as I am aware. All the authorities on spinal curvature who have described rotation of the vertebræ regard this condition as a late change, a complication, or a superadded condition of lateral curvature, which they consider essentially to be a lateral deviation of the spinal column caused by muscular weakness before rotation takes place. The most recent English writer on lateral curvature commences his description of the pathological anatomy with the following sentence—"Scoliosis may be divided, according to its degree, into spinal curvature, with and without rotation of the vertebræ;" (c) but a careful study of this affection has led me to consider that horizontal rotation of the bodies of the vertebræ occurs in all cases of lateral curvature as a constant and essential condition of this affection, however slight the deviation may be, and that it occurs in a large number of cases before any lateral deviation of the apices of the spinous processes—the indication generally relied upon as diagnostic of lateral curvature—takes place. I need hardly say, however, it does not exist in those cases of muscular debility, or *weak spines*, which are too often assumed by some Practitioners to be cases of lateral curvature, and treated as such, with wonderfully good results, under any and every mode of treatment.

HISTORICAL NOTICES OF HORIZONTAL ROTATION OF THE BODIES OF THE VERTEBRÆ IN LATERAL CURVATURE.

The first mention I have met with of rotation of the vertebræ in lateral curvature occurs in a somewhat remarkable book published by the late Dr. Dods, of Bath, in the year 1824, entitled "Pathological Observations on the Rotated or Con-

(b) *Op. cit.*

(c) "On Lateral Curvature of the Spine." By B. E. Brodhurst. Churchill. 1855.

torted Spine, commonly called Lateral Curvature."(d) The author endeavoured to prove that the condition generally described as lateral curvature was really one of transverse rotation of the vertebral column, the natural flexures of which were by this movement brought more or less into view posteriorly instead of laterally; that, in fact, as an object becomes changed in its appearance from change of position or by varying the point of sight, so an altered position, the result of rotation of the spinal column, produces the deceptive appearance of lateral curvature. At page 23 he remarks, "As the spine is rotated spirally, and not as upon a pivot, the profile of its flexures will be imperfect;" and in this way he explains the existence of only one or two curvatures. As to the mode by which he was led to these conclusions, Dr. Dods observes at page 101, "During the course of my operations [alluding to friction, etc.] upon several patients, I was struck in all of them (for they were all contorted to the right side) with a considerable bony hardness and projection on the left side of the loins, raised nearly to a level with the spinous processes; and this I found to be the case in the patients whose spine exhibited *little or no apparent curvature in the loins*, as well as in those in whom the apparent curvature was very great." After the muscles had been relaxed by friction, Dr. Dods was enabled to satisfy himself that the bony prominences were produced by the transverse processes of the lumbar vertebræ, which could be distinctly felt and counted like the spinous processes. In these cases the transverse processes of the same vertebræ on the opposite side could not be felt, and appeared to have sunk inwards completely out of reach. Reasoning upon these facts, and considering that a direct lateral curvature of the column could only affect the transverse processes by separating them on one side and approximating them on the other without altering their transversity with respect to the body, Dr. Dods concluded that such a condition could only be produced by a movement of transverse rotation. Thus it would appear that Dr. Dods arrived at his conclusions—we may say his theory—by inference from certain facts observed by him while rubbing his patients, and much credit is undoubtedly due to him for careful and original observation, though the explanation of the phenomena observed, their mode of production, and the indications for, and methods of treatment given, are in many respects erroneous. No dissections or post-mortem examinations are recorded by Dr. Dods, nor does he allude even to skeletons or specimens as exhibiting the rotation he correctly inferred to exist.

This at once offers a sufficient explanation of rather an important discrepancy between the account given by Dr. Dods of this rotation as affecting the direction of the bodies of the vertebræ, the spinous and the transverse processes, and the diagram by which he illustrates his description. In the diagram a considerable curvature of the spine to the right side through the dorsal region is represented; the apices of the spinous processes deviating to the right side, but the bodies of these processes lying obliquely and directed towards the left side, therefore the bodies of the vertebræ must also be directed towards the left side—the concavity of the curve; but there can be no doubt that in all such cases the bodies of the vertebræ are invariably directed towards the side of the convexity of the curve.

As to the cause and mode of production of this condition of rotation, Dr. Dods believed it to be produced by active muscular contraction of the extensor muscles of the spine, acting from the fixed pelvic bones, upon the transverse moveable levers, viz.—the ribs and transverse processes of the vertebræ. The active muscular retraction described is not supposed to be spasmodic, or to depend upon any abnormal condition of the nervous centres, but to result from frequent and protracted voluntary muscular efforts to keep the body in the erect position under the restraining influence of school discipline. This state of constant contraction of the spinal muscles is supposed to lead to their disorganisation by producing, "in the first place, debility; secondly, a wasting of their substance; and lastly, permanent contraction of their fibres."—Page 78.

The late Mr. John Shaw does not describe this condition of rotation of the spine in his excellent treatise on "Distortions of the Spine," published in 1823 (e), but in his second work entitled "Further Observations," etc., published in 1825 (e), page 8, and also in the folio volume of plates, with descriptions, published by him in 1824, (e) page 3, later in the year than the publication of Dr. Dods' book, to which he makes some severe critical allusions, Mr. J. Shaw describes the altered relations of the scapulæ as depending upon "that peculiar twist of the spine on its axis which has been scarcely observed by any author, although it always accompanies even the slightest degree of serpentine or lateral curvature." It does not appear, however, that Mr. J. Shaw attached any practical importance to this condition of rotation, nor does he attempt any explanation of it; this was reserved for his brother, Mr. Alexander Shaw, whose observations on this subject I shall presently advert to when describing the structural changes which occur in this deviation.

Bouvier, in his very detailed and accurate description of the Pathological Anatomy of Lateral Curvature (f) describes rotation as existing only in the severe forms of curvature, but alludes to the want of correspondence between the external and internal deviations.

From an observation made by Sir B. Brodie, in a clinical lecture on Lateral Curvature, delivered by him in December, 1846, and published in the *London Medical Gazette*, it would appear that M. Guérin had observed the co-existence of rotation of the bodies of the vertebræ with very slight deviation of the spinous processes. Sir B. Brodie observes "at a very early period, and even before the lateral curvature is very distinct posteriorly, the bodies of the vertebræ are actually twisted to one side. This curious circumstance was pointed out to me by M. Guérin, who has some preparations in which the fact is very perceptible." Mon. Guérin, in his memoir published in 1843 (g), page 18, alludes to the modifications of form dependent upon the double influence of vertical displacement caused by lateral flexion, and of horizontal displacement caused by torsion. He was evidently aware of the existence of rotation, and had noticed the disproportion between the internal and external curvatures, but he does not allude to rotation of the bodies of the vertebræ as at any time co-existing with an absence of lateral deviation of the apices of the spinous processes, or as occurring in the early stage of lateral curvature, and therefore it is not mentioned in its most important practical bearing upon the diagnosis of internal curvature in cases in which the external indications generally relied upon as diagnostic by Surgeons are absent.

The same remarks may be made on the observations of Sir C. Bell who has accurately described the rotated condition of the spine in lateral curvature in the following words:—"It must be especially observed that this distortion of the spine is not merely a lateral curve; the column is twisted or twined on its long axis. The effect of this is very particular. First, in the loins it causes the transverse processes of the lumbar vertebræ of the left side to project, so as to thrust out the long muscles of the back, and chiefly the longissimus dorsi and sacro-lumbalis. Whilst a fullness by this means is presented on the left side of the spine, in the loins, there is a flatness or hollow on the right side. Exactly the reverse of this takes place in the upper part or the dorsal vertebræ. The spine is turned round from right to left below, and from left to right above. See the judicious remarks of Mr. A. Shaw on cutting the muscles of the back, Note vii." (h) Diagrams illustrating the effect of the upper twist upon the conformation of the chest made by Mr. A. Shaw, are then given, and will be again adverted to when the effect of the spinal curvature upon the chest is described.

In the more recent works on lateral curvature, less attention has been paid to the subject of rotation of the vertebræ than in the writings to which I have referred, and in none of

(d) "Pathological Observations on the Rotated or Contorted Spine, commonly called Lateral Curvature." By Andrew Dods, M.D. London: Dated January 2, 1824.

(e) "On the Nature and Treatment of the Distortions to which the Spine and Bones of the Chest are subject." By Mr. John Shaw. London: 1823. Also, "Further Observations on the Lateral or Serpentine Curvature of the Spine," etc. By Mr. J. Shaw. London: 1825. And "Engravings Illustrative of a Work on the Nature and Treatment of the Distortions," etc. Folio. By Mr. J. Shaw. London: 1824.

(f) "Dictionnaire de Médecine et de Chirurgie Pratiques." Supplément, S. 2. u. ione—Zinc. Vol. 15, à Paris, 1836. Artic. Vertébrale (Déviations de la Colonne), par Bouvier.

(g) "Premier Mémoire sur le Traitement des Déviations de l'Epine par la Section des Muscles du Dos," par Dr. Jules Guérin. Paris: 1843.

(h) "Practical Essays," by Sir Charles Bell. Edinburgh: 1842.

them is more importance attached to it than as a late effect, or complication of lateral curvature in severe cases of long standing; but I feel convinced that the examination of specimens of lateral curvature, and a consideration of the anatomical and mechanical construction of the spinal column, will lead you to agree with me in attaching the highest degree of clinical importance to these deviations in the bodies of the vertebræ, and the alterations in the oblique articular processes upon which they depend, more especially in reference to the diagnosis and treatment of slight cases of spinal distortion.

ORIGINAL COMMUNICATIONS.

ON ACUPUNCTURE IN THE TREATMENT OF MUSCULAR RHEUMATISM

AND ON

GALVANISM IN RHEUMATIC PARALYSIS.

By ARTHUR LEARED, M.D.,
Physician to the Great Northern Hospital, and Lecturer on the Practice of Medicine.

The treatment of muscular rheumatism is sometimes so unsatisfactory as to exhaust the patience alike of the sufferer and of his Medical attendant. In the following remarks, I wish to show the efficacy of two powerful remedial agents—acupuncture and galvanism. The latter is at length beginning to claim the attention it deserves; but acupuncture, though employed by that observant and practical people, the Chinese, from immemorial time, has not been fairly tested in our modern practice. It is not my intention to offer any speculation on the *ratio medendi* of this curious mode of treatment—only remarking that it possibly depends on the production of galvanic currents.

Several years ago I was consulted by a lady for rheumatism, the principal seat of which appeared to be the right deltoid muscle. It was attended by considerable loss of power, and the severe and constant pain had seriously impaired the patient's health. Hearing that a number of approved remedies had been employed without effect, it occurred to me to give acupuncture a trial. Three or four needles were deeply inserted in the affected part, and allowed to remain about an hour. The result was complete cure of the pain, and the full use of the arm was soon recovered.

Many cases apparently of the same sort of rheumatism came under my treatment when I was Physician to the Civil Hospital at Smyrna during the late war. Acupuncture was tried in one case, in which pain was also referred to the deltoid muscle, but it seemed to be of no avail. But while I think it right to mention this, it is to be added that there was too often cause to suspect either that no pain really existed, or that its relief was tardily admitted. The harassing duties of the Crimean trenches, from which these patients had recently escaped, made them sometimes unscrupulous in devising means to delay their return to duty.

In the next instance, the details of which I give from my note-book, acupuncture was quite successful.

A gentleman, 50 years of age, and of strong constitution, consulted me January 20, 1860, for rheumatism, contracted, as he believed, from sleeping in a damp bed while travelling. He had for some time suffered severe pain in the right arm and shoulder, but not immediately in the shoulder-joint. It was evident that the deltoid muscle was the part chiefly affected, but pain also extended in the course of the trapezius muscle to the back of the head. Loss of power over the arm had gradually ensued, and was so complete when I first saw him, that with the scapula fixed he was incapable of raising it in the smallest degree. The temperature of the part seemed to be rather below that of the other arm, and sensation was slightly impaired.

I prescribed the iodide of potassium in full doses, and it was continued until its specific effects were experienced, but no benefit resulted. Colchicum was also fairly tried without any benefit. Tonics and sudorifics in succession shared the same fate. In short, with the exception of temporary relief obtained from opiates, rendered necessary by the suffering and loss of rest; no internal treatment appeared to benefit the patient. In the meantime, external applications were not neglected, stimulating and narcotic liniments, containing ammonia, turpentine, tinctures of opium and aconite, etc., were diligently rubbed in. Sulphur was applied to the arm by means of a flannel bandage. The effect of heat was tried by means of bags of salt as hot as could be borne, and finally, the firing iron of Dr. Corrigan was freely employed. But the benefit afforded by any of these measures was either so trifling or so transitory that I felt almost in despair about the case.

The signal success which attended the use of acupuncture in the case first mentioned, caused me, however, to suggest it to the patient, who consented to have it tried. I now cautiously introduced three stout needles into the deltoid muscle until they touched the humerus, at about equal distances from each other, and the needles were left inserted about an hour. Almost immediate and permanent relief was obtained. The patient scarcely complained from that time of any pain in the shoulder or arm, but the paralysis continued as at first. For this state of things galvanism naturally suggested itself. I began with its milder effects, using the ordinary induction apparatus and the intermittent current, while the force of the shocks was gradually increased. The result was perfectly satisfactory; the patient was galvanised on alternate days for about a fortnight, and every application was attended by an improvement, rendered visible by the increased power of raising the arm. On February 29 (at the end of the time above named), he declared himself quite recovered with the exception of an aching which occurred in the side of the neck when he suddenly moved it, but this comparatively trivial symptom did not leave him for a considerable time. I ascertained very lately that no relapse had taken place and all unpleasant sensations had long disappeared.

The foregoing successful cases prove the great value of acupuncture, because in them many other remedies had been previously employed without avail, while its speedy action indicated its real efficacy.

The potency of galvanism was also shown in one of the cases, but there is sufficient evidence that it usually acts beneficially whenever, as in this instance, the paralysis is due to a peripheral affection of the motor nerves.

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HOLIDAY NOTES ON SOME CONTINENTAL SPAS.—AIX-LES-BAINS.

By HERMANN WEBER, M.D., F.R.C.P.
Physician to the German Hospital.

(Continued from page 430.)

Aix-les-Baines or Aix-en-Savoie is a small town of about 4000 inhabitants, situated in the charming valley of Chambery, rather less than 800 feet above the level of the sea, and about 90 feet above that of the beautiful lake of Bourget, from which Aix is not quite a mile distant. The railway from Geneva to Turin passes Aix, which can be reached from Paris in fifteen hours, and from Geneva in less than three hours. It has formerly belonged to Sardinia, the tombs of Victor Emmanuel's ancestors being only a few miles distant at the Abbey of Hautecombe; but in 1860 it has been, with the rest of Savoy, annexed to France. The country surrounding Aix is most beautiful, combining the grandeur of the alpine scenery with the loveliness of the Italian vegetation. The climate is healthy; it is mild in winter, and is said not to be extremely hot in summer, the neighbourhood of the lake of Bourget imparting to the air always a certain amount of freshness. High mountains surround the valley on the east, west, and for the greater part on the north, leaving it open to the south, towards Chambery.

Consumption, Drs. Despine and Vidal have informed me, is almost unknown at Aix, and pulmonary affections, in general, are comparatively rare. Accurate statistical accounts, however, I have not been able to obtain. The country people have a strong and healthy appearance. The soil is formed of a kind of limestone (*calcaire néocomien*) covered by sand and tertiary strata.

Aix-les-Bains, with its baths and its scenery, is, if I may judge from repeated conversations with Medical men and others, as yet, little known to the English nation, although the shortest route from London to Turin, over the Mont Cenis, passes through it,—a route which abounds in beauty from Ambérieux to Culoz and Chambery,—and although more than 6000 visitors flock to it every season for the sake of their health. Some English, however, have already found relief at Aix, for it has a charitable institution, the "Hospice," which owes its existence principally to the munificence of an Englishman, Mr. Wm. Haldiman, who, in grateful remembrance of the cure of an intense sciatica, as I am informed, gave in 1829 £10,000 for the purchase of a house and furniture for fourteen beds. This excellent institution has since then been much enlarged by donations from others. Aix has been used already as a thermal station by the Romans, being the celebrated *Aquæ Gratianæ*. The arch of Campanus, the Roman baths, and the temple of Diana are important remains from that period.

The springs of Aix belong to the sulphuretted thermal waters with only about three grains of solid constituents in sixteen ounces; the sulphur being contained in them as sulphuretted hydrogen. There are two springs at Aix, one of them being called *source de soufre*, the other *source d'alun*, or *source de Saint Paul;* the average temperature of the former is about 113° F., that of the latter 115° F.; both are perfectly limpid, and have a distinct smell and taste of sulphuretted hydrogen, the sulphur spring rather more than the alum spring, which latter, however, according to the last analysis, does not contain any alum, and differs in its composition only slightly from the sulphur spring. Aix owes its importance much less to the mineral constituents of its springs, than to the high temperature of the latter, to the great volume of water which they pour forth (almost 7,000,000 litres in twenty-four hours), and to the skilfull manner in which this is used. The great "*Etablissement Thermal*" erected by King Victor Amédée, of Sardinia, in 1773, has during the last few years been considerably enlarged, and is undergoing further alterations; it contains, besides seventy single baths, many of which are provided with moveable local douches; two large basins (piscines) for swimming and gymnasties, one for male and one for female patients; several smaller piscines for families; more than thirty spacious apartments for douches, well furnished with apparatus for the management of force, volume and temperature of the douche; several vapour-baths, called "Enfers," (an appropriate name, as they are subterranean, dark and hot); two large rooms for the inhalation of the vapours of the water; and two fountains providing the water of the two springs for internal use. There are constantly employed thirty-two persons, males and females, who are exceedingly well versed in the art of douching and shampooing, and besides these a great number of porters and other assistants. In addition to the great establishment, there are at Aix the Thermes Berthollet and the Bain Royal with similar arrangements for the poor.

Among the therapeutic resources of Aix must be enumerated some mineral springs, situated in the neighbourhood of the town, and very frequently prescribed for internal use to the visitors of Aix. The annexed table exhibits the chemical constitution as well of the two springs of Aix itself, as also of the principal ones of the neighbourhood.

The spring of Marlioz, a small establishment in a pretty situation near Aix, is one of the most valuable cold sulphuretted springs with which we are acquainted. Although it is little known, yet it is richer in sulphur than the most renowned sulphur springs in France. Thus, according to M. Bonjean, 1000 grammes of the water of Marlioz contain 0·038 grm. of pure sulphur, while those of Allévard (department d'Isère) contain 0·035 grm., those of Le Vernet (Pyrénées Orient.) 0·022 grm., those of Enghien (near Paris) 0·016 grm., those of Amélie-les-Bains or Arles (Pyrénées Orient) likewise 0·016 grm., those of Baréges (Hautes-Pyrénées) 0·015 grm., those of Eaux-Bonnes (Basses-Pyrénées) and those of Canterets (Hautes Pyrénées) only 0·007 grm. The waters of Marlioz have, besides, the advantage of containing the sulphur, not only in the condition of sulphuretted hydrogen, but also a considerable portion of it as sulphuret of sodium, by which the transport of these waters is rendered possible without the loss of their specific properties. The establishment at Marlioz contains, besides two drinking-fountains, several rooms for the inhalation of the vapours and gases of the spring. In one of the apartments the water is, by means of a simple apparatus, finely pulverised, in order to impregnate as much as possible the whole atmosphere with its vapours. Large quantities of the water of Marlioz are sent to Aix for internal use as well as for admixture with the baths.

Substances contained in 1000 grammes of water.	Soufre. J. Bonjean, 1838.	Alum. J. Bonjean, 1838.	Marlioz. J. Bonjean, 1850.	Challes. O. Henry, 1842.	Coise. P. Morin, 1851.
			c. c.		c. inch
Light carbonetted hydrogen ..	..	..	..	..	0·0171
Nitrogen	0·08304	0·08010	9·77	traces	0·0262
Free carbonic acid	0·02578	0·01334	4·64	..	0 0095
Free hydro-sulphuric acid.. ..	0·04140	..	6·70	..	..
Oxygen	..	0·01840	..	..	0·0063
Silicious acid	0·00590	0·00430	0·006	..	..
Silicate of soda	..	..	..	0·0410	..
,, of alumina and lime ..	..	..	..	..	0·0162
Phosphate of alumina	..	..	..	0·0580	..
,, of lime	0·00249	0·00260	..	..	traces
Fluoride of calcium	..	..	..	..	..
Sulphuret of sodium	..	..	0·067	0·2950	..
,, of iron and manganese	..	..	..	0·0015	..
Carbonate of lime .. .. :	0·14850	0·18100	0·186	0·0430	0·0115
,, of magnesia	0·02587	0·01980	0·012	0·0300	0·0191
,, of soda	..	..	0·040	0·1377	0·8136
Bicarbonate of potash	..	..	..	..	0·0045
,, of iron	0·0086	0·00926	0·013	..	..
,, of manganese ..	..	..	0·001	..	..
,, of ammonia	..	..	..	..	0·0151
,, of strontia	traces.	traces.	..	0·0100	..
Sulphate of soda	0 02602	0·04240	0·028	0·0730	..
,, of lime	0·01600	0·01500	0·002	..	..
,, of magnesia	0·03527	0·03100	0·018	..	0·0033
,, of alumina	0·05180	0·06200	..	..	..
,, of iron	traces.	traces.	0·007	..	..
Chloride of sodium	0·00792	0·01400	0·018	0·0814	0·0041
,, of magnesium	0·01721	0·02200	0·014	0·0100	0·0034
Iodide of potassium..	traces.	..	..	0·0099	..
,, of magnesium	..	..	..	..	0·0077
Bromide of sodium	..	..	..	0·0100	..
,, of magnesium	..	..	..	..	0·0015
Glairine	traces.	traces.	traces	0·0221	0·0122
Crenate of the oxide of iron ..	..	..	..	traces	0·0020
Loss	0·01200	0·00724	0·017	0·0325	..
Solid constituents in 1000 grammes	0·42968	0·41070	0·429	0·8551	0·9142
Temperature, F.	113°	116·7°	57·2°	53·6°	54 5°

The springs of Challes have been discovered, only a few years ago, by Dr. Domenget, of Chambery, in his own property near that town. They are, in some respects, even more important than those of Marlioz; they do not contain any sulphuretted hydrogen, but a much larger proportion of sulphuret of sodium, viz. 0·295 grm. in the litre, and, according to a more recent analysis, even a still larger quantity. This large amount of a fixed sulphuret is, as already mentioned, a great advantage, wherever sulphuretted waters are to be used at a distance from the spring. The springs of Challes, however, do not owe their virtues to the sulphur alone, but the considerable proportion of bromide of sodium and of iodide of potassium, combined with a moderate quantity of carbonate of soda and other salts, enhances their value. There is, as yet, neither an establishment for bathing nor for the reception of patients at Challes; but some find accommodation at Chambery, while the majority reside at Aix, where they combine the external use of the baths and douches of that place with the internal use of the waters of Challes.

The waters of Coise, or Coeze, in the valley of the Isère, about fifteen miles from Aix, are likewise frequently prescribed to the visitors of Aix. In addition to the large amount of iodide of magnesium and of bromide of sodium, they contain a considerable proportion of bicarbonate of soda and of ammonia. The presence of this latter substance, and of the light carbonetted hydrogen, distinguish the springs of Coise from almost all other mineral waters. The late Dr. Rilliet, the well-known Physician of Geneva, used to place great value in the efficacy of this water in strumous complaints.

A mild chalybeate spring at *Saint-Simon*, a village about a mile distant from Aix, ought not to be forgotten among the therapeutical resources of that place.

The properties of the two springs of Aix itself are, as

stated above, those of a weak sulphuretted thermal water. They are not much used internally, and as far as their external application is concerned, their action is scarcely different from that of ordinary warm water. Their use is, therefore, a species of *hydrotherapia calida*. I say this without the slightest disparagement. I have had the opportunity of convincing myself of their powerful and beneficial influence; but I am inclined to ascribe this influence almost entirely to their temperature and to the varied manner in which they are used, and not to their mineral constituents. The simple bath at Aix differs little from that of other thermal Spas, as Wildbad, Gastein, Ragatz, Teplitz. The temperature is about 90° to 94° F., the duration about an hour. The vapour baths are arranged in tolerably spacious apartments by means of the steam arising from the Aix waters. Those called "Enfer" are the most peculiar, the rooms being dark and the temperature between 104° and 113° F., which temperature, as the air is saturated with steam, gives to the skin the sensation of a very high degree of heat. The usual duration of a vapour bath is at present only about ten minutes, being rarely extended beyond twenty minutes. There are other vapour baths of a lower temperature, which are in general used before the patient is sent to the "Enfer." The douches and their management, however, are the most distinguishing feature of Aix-les-Bains. I am, at all events, not acquainted with any place where they are so extensively employed with such perfection and in so varied a manner. The patient sits on a small stool, the feet being immersed in warm water beyond the ankles, and is surrounded by an atmosphere almost saturated with the warm vapours arising from the hot water constantly falling down by his side. One or two *doucheurs* (if a female, *doucheuses*) apply very dexterously the douches during five, ten, or fifteen minutes to various parts of the body, according to the direction of the Medical man, combining the process of shampooing with that of douching. The character of the douche, as to force and temperature, can be infinitely modified according to the Doctor's prescription. The so-called *douche écossaise*, an alternation of the hot and cold douche, is frequently employed. The sensation produced by the douche and the shampooing or massing as practised at Aix is to most persons a most delightful one. The abundance of water which showers down upon you in Aix is, no doubt, an important element as well in the attractiveness as also in the usefulness of these douches. After the vapour bath, as well as after the douche, the patient is wrapped up in a large sheet of linen, calico, or flannel, then surrounded with woollen blankets, and carried in a chair to his hotel, where he remains during an hour, thus wrapped up in bed for the purpose of sweating. During this time a professional *sécheur* (or *sécheuse*), (a) occasionally wipes the face and administers the mineral waters prescribed.

Besides the large douches, there are various kinds of local douches and local vapour baths, in which not only the water of Aix, but also that of Marlioz and Challes may be used, as, for instance, in the vapour douches to the throat in cases of chronic pharyngitis.

The rooms for the inhalation of vapours (*salles de vapeur*) are spacious. One of them is kept at a temperature of between 75° and 80·6° F.; the other between 78·8° and 89·6° F. The inhalation rooms at Marlioz appear to us to be preferable to those at Aix itself, not only on account of the greater mineralization of the vapours, but also on account of the lower temperature, which ranges between 68·0° and 75·2° F.

The *piscines*, or *swimming-baths*, form another therapeutical apparatus at Aix. In these baths the patient is, during an hour, under the united influence of a large body of warm water, and one of the most useful exercises, calling into action almost all the muscles of the body.

It can well be imagined that an hour's swimming in warm water, combined with some other gymnastic exercises, practised in the piscines, must have a very powerful effect on the metamorphosis of tissue and on the nutrition in general, but accurate researches on this point are wanting. The same may be said of the douches at Aix, which, in the manner in which they are practised, comprise the warm vapour-bath, the douche, the shampooing, and the hour's sweating in the woollen blankets. With regard to the influence on the circulation, I have to mention some interesting observations by Dr. Pétréquin, of Lyons, and Dr. Vidal, of Aix, who have found that the vapour-bath as well as the douche, has a decidedly sedative effect. The pulse rose in the average of fifteen observations on the person of Dr. Pétréquin from 80·46 beats in the minute, before the vapour or douche-bath, to 122 beats in these baths, and sank "after the reaction" to 66 beats per minute. (Dr. Vidal's "Essai sur les Eaux Minerales d'Aix-en-Savoie." Chambéry, 1851, Appendix.)

Concerning the manner in which the various resources of Aix are employed, it is impossible to give an accurate idea by a few words. The diseases attended there are very different in degree and nature; the treatment, accordingly, must likewise vary considerably. Formerly it was the habit to stay about thirty days at Aix, to take, during that time, about twenty douches of from ten to twenty minutes' duration, about six or eight common baths or piscines, and to drink between thirty and sixty tumblers of the Aix mineral water. Feverish disturbance (*fièvre thermale*) and a bathing eruption (*poussée*) were frequently the result of this treatment, and were by many considered as critical phenomena of a favourable nature. At present a milder course is, in general, pursued; the number of douches given is smaller, and their duration, in the average, shorter; the number of simple baths and of baths in the piscines is increased; and the internal use of the waters of Marlioz and Challes is more generrlly prescribed. The thermal fever and the bathing eruption are now not any more considered beneficial, and and are, in general, avoided; the life of the visitor of Aix is, through this modified treatment rendered more comfortable, and all the dangerous consequences, arising from a too active course, are evaded.

(To be continued.)

(a) The *sécheurs*, or *sécheuses* (dryers), are confidential persons attached o every hotel. They have the duty to accompany the patients to the bath, and attend to them during the process of sweating.

ON

THE TREATMENT OF GOITRE WITH THE BINIODIDE OF MERCURY OINTMENT.

By H. M. GREENHOW, F.R.C.S. Lond. and Edin.,
Brevet-Surgeon H.M. Indian Army.

I AM induced to make this brief communication more in the hope of exciting attention to the subject of goître and its treatment, especially with a view to a trial of the biniodide of mercury ointment in western countries where goître prevails, than with the idea of advancing any new theories as to the disease.

Mr. Hamilton of the Benares Opium Agency, mentions in a letter to the Board of Revenue, lately published, that Mr. Nicholson of that Agency has used the biniodide ointment after Major Holmes' and Captain Cunnnigham's plan in several hundred cases, with the best effects; and he suggests that subscriptions should be entered into to enable the poor people of the districts bordering on the Great Teraie, in which it prevails, to benefit by this really wonderful remedy. Mr. Hamilton's suggestion is a very good one, and deserves to be followed out.

The station of Segowlee, from whence I now write, is situated pretty nearly due east of Goruckpore, at a distance of 95 miles, long. 84° 95′ E., lat. 27° 10′ N. It lies on the right bank of the Chota (Little) Yunduck, within thirteen miles of the Nepaul frontier. The country round is well wooded and cultivated, much opium and indigo being grown. The climate is moist and excellent in the cold weather. The winds principally easterly. The soil, like that of Oude, is "kunkur" (clay charged with lime), covered by sandy soil. It was here that the unfortunate Major Holmes treated goître so successfully, and here, too, that he was so barbarously murdered during the Indian Mutiny.

Since I came here in November, 1860, I have felt it a pleasure to carry out, as far as my limited means would allow, the biniodide of mercury treatment of goître among the poor people of the district; and, having no dispensary or other funds, I have followed the plan of causing the Native Doctor of my Regiment (the 3rd Sikh Irregular Cavalry) to apply the ointment to all who chose to pay 2 pice (about a halfpenny) for it, this small sum having been found by Major Holmes sufficient to cover the expense of the medicine. During the last six cold months more than 1500 people have been treated at Segowlee, and with the greatest success. Some cases

required a second or even third application of the ointment, but very few proved incurable. I may mention that I used a stronger ointment than was prescribed by Major Holmes or Captain Cunningham, for to 3lbs. of lard or fat, 12 drachms of biniodide of mercury were added. After this ointment was smeared over the goître, the patient sat in the sun with his neck well exposed. The effect was apparent in an hour or two, for a blister rose; but in the course of a week or ten days this healed, and left the tumours, if not completely cured, at least very greatly diminished. The people willingly paid their money, and, indeed, were eager to do so; but since the hot weather set in they have nearly ceased to attend.

My friend, Dr. Coates, Civil-Surgeon of Motecharee, has kindly given me the result of his dispensary practice during the last six cold months. It seems he had a total of 13,067 cases, of which 7677 have been cured, 3318 relieved, 768 have not benefited or have been found incurable, 937 have ceased to attend, and 367 are still under treatment. These results are very satisfactory, and prove the immense benefits to be derived from the use of the biniodide ointment. The remedy has, indeed, a wide-spread reputation in these districts, and is considered a certain cure. That being so, the question arises whether it might not be introduced into western countries; into Europe and America, into the valleys of Switzerland, the hills of Derbyshire, the valleys of the Ohio and the Mississippi. There is not, it is true, in all these countries, the same powerful sun which in India help us so in the action of this remedy; but where the sun is absent, it would be well to try whether a roasting fire would not supply its place, and raise the required blister. There can be little doubt that it would do so, and if those who make the experiment would communicate the results they met with to the *Medical Times and Gazette*, we might have a valuable record of the experience thus gained.

I have already (*Indian Annals of Medical Science*, No. xii.) entered so fully into the subject of goître generally, and more especially into the disease as met with in India, that I do not propose now to discuss it; but there are one or two remarks which occur to me as worth making here:—

1. If there is no confirmation of my theory that drinking *lime-water* is the main cause of goître, at least I have met with no facts tending substantially to shake that theory. All the well-water round this Station contains much lime, and two wells in the lines of my Regiment have acquired such a bad reputation for causing goître, that the sowars prefer the river water for drinking purposes. About a dozen of them, who had never suffered from goître before they came into this district,—men from Delhi and the Punjaub, who had not so much as heard of goître—became affected with the disease in the last few months, but were easily cured by the biniodide treatment. The fact of these sowars, strangers in this part of the country, becoming goîtrous, shows that the cause is a local one, and goes far to prove it to depend on the water of the district; for, except as regards the water, these men's food and drink were the same as those to which they had previously been accustomed. They all set their disease down to the water, and I think with reason; and, as far as we know at present, the excess of lime in it is its greatest peculiarity.

I ought to say that Dr. Macnamara, the Civil Surgeon of Tirhoot, has been conducting a series of experiments for some time past, which have for their object the elucidation of the cause of goître; and I trust he may soon have some fresh light to throw on the matter.

2nd. As regards the connexions of goitre with cretinism, I have not seen any reason to change my opinion that the two are by no means necessarily connected. Among all the goîtrous patients treated by me, no cretins (or *baods*, as they are called here) were met with; yet there are many *baods* in the country round. These persons are doubtless often goîtred, for they are exposed to the same causes of goître as others; but if many hundreds of goîtrous persons are brought promiscuously together, and no *baods* are found among them, that is strong *primâ facie* proof that the two diseases are not necessarily connected. Inquiries have been attempted to be instituted with a view to eliciting the causes of *baodism* here, the number of *baods*, male and female,—goîtred and ungoîtred; whose parents had or had not goîtres; who were born *baods*, etc., etc.; but no satisfactory results have been obtained. The difficulties of such an investigation are obviously very great.

Segowlee, India.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.
Assistant-Physician to the Metropolitan Free Hospital.

THE "DREADNOUGHT" SEAMEN'S HOSPITAL.

CASES OF THORACIC ANEURISM.

In reference to the following cases, Dr. Ward remarked that he considered sailors to be peculiarly liable to aneurism. There had been six or seven cases on the Medical deck of the *Dreadnought* during the past year; and of twenty-three cases collected by Dr. Darrack from the case books of the New York Hospital, not less than fourteen had occurred in sailors. Their liability to the disease is accounted for by their free exposure to the predisposing and exciting causes. Syphilis has been regarded as a predisposing cause, and has been supposed to operate as such by occasioning a softness of the arteries and ulceration of the inner coat. How far this view can be supported, Dr. Ward was unable to say. Admitting syphilis to have any such influence, there is no class of the community so thoroughly saturated with it as sailors. Mr. Guthrie and others have laid much stress on another predisposing cause, which would peculiarly operate in their case—namely, the inordinate use of spirituous liquors, and which is said to act by inducing a softening and disorganization of the coats of the vessels, and so favour the action of exciting causes. Intemperance is also an exciting cause, periodically increasing the force of the circulation. Sailors are also subject to other exciting causes, such as violent sudden efforts, especially involving the muscles of the chest, accidents, etc.

The case of double aneurism, with extensive atheromatous disease of the aorta, countenanced the view of Rokitansky as to the existence in some subjects of an aneurismal diathesis. The belief in such a diathesis rested upon the facts that the predisposing atheromatous disease of the vessels is not limited to the seat of aneurism, and that two or more aneurismal tumours may co-exist. The case alluded to also countenanced the view of Rokitansky, that in the aspect of the patient, etc., the aneurismal appears at times to present an analogy with the cancerous diathesis. With respect to the aspect of this disease, Dr. Ward remarked that his experience did not lead him to recognise any that could be regarded as diagnostic. In two of the cases the aspect was markedly that of malignant disease, and in one or two there was the patchy capillary injection of the cheeks with a sallow border, which has been regarded as diagnostic, but which might be equally so of some cardiac affections. A sense of uneasiness and distress is at times depicted in the countenances of the sufferers.

Pain is the symptom which would seem first to excite the attention of the patients, occurring in the head and neck, in one or other shoulder, in the breast or back, and frequently coming on suddenly. Of the diagnostic symptoms of aneurism of the thoracic aorta or its branches, next to the pulsating tumour, are indications of interference with the respiratory organs, hissing or wheezing breathing, croupy cough, hoarseness, or loss of voice. A difference in the pulses of opposite sides of the body will sometimes aid in determining the site of the aneurism. In some instances the diagnostic symptoms of the affection are not present. Thus, in one case the only symptom was paroxysmal dyspnœa, attended with lividity of countenance and urgent sense of suffocation; and in the case of the double aneurism the prominent abdominal symptoms entirely diverted attention from the chest.

Dr. Ward, in conclusion, made some remarks upon the Valsalva and other plans of treatment, referring to his own case and to one under Mr. Adams, in which the local appli-

cation of ice had been followed by successful results, stated that he should be disposed to make further trial of this plan.

(Under the care of Dr. WARD.)

Case 1.—*Aneurism of the Ascending Aorta.*

[Reported by Dr. PLOWMAN.]

James F., aged 33, was admitted into the *Dreadnought* Seamen's Hospital on December 7, 1856, under Dr. Ward. He has been fifteen years at sea, and has never had any serious illness, neither rheumatism, fever, nor cough. Habits uncertain and varying, but he considers himself, on the whole, a temperate sailor. Nine years ago he fell on the right shoulder from the fore-yard and was much bruised and shaken; two or three large scars still remain. About four years ago he joined Captain Austen's expedition to the Arctic regions, and was out eighteen months; during the greater portion of this time he was subject to very heavy work, having, with others, to drag (by means of a rope passed over the right shoulder) the sledges containing the provisions, etc., over the ice. Eighteen months ago he sustained a fracture of the left fore-arm, for which he was treated in Ceylon by the Surgeons of the 38th Regiment, then stationed round the Pont de Galle Hospital. While in this Hospital he was seized with sharp lancinating pain in the right breast, referred to a spot a little above and internal to the right nipple. With his left arm in a splint, he had been lying chiefly on the right side, not being allowed to leave his bed; and this pain was consequently regarded as the result of confined posture, and no particular attention paid to it. After a time, however, it got easier, and when his arm was united, he again went to sea. The pain has, since this time, gradually increased, and has been radiating over the shoulder and down the inner side of the right arm, along the course of the vessels and nerves. The pain is not constant in its severity, being aggravated by occasional fits of intemperance, and subject to occasional intervals of ease. During the last month the pain has been more and more constant and severe, and he has been obliged to give up work. The upper portion of the right side of chest appeared prominent, the centre of the prominence being at the junction of the cartilage of the third rib with sternum. This part of the chest was very tender on pressure, and a slight impulsive thrill could be felt in it. Percussion over this portion was quite dull; normally clear over the rest of the chest. On auscultation of the heart, its sounds could be distinguished at the apex, and appeared healthy; towards the base of the heart they were obscured (especially the second sound) by a loud murmur, which more or less completely masked them, and became louder and rougher as you approached the prominence alluded to. There was no difference in the pulse of either side, nor in the beatings of the carotid arteries, and there was no tortuosity in the course, or any thickening of the coats of any of the arteries. Over the course of the larger arteries, "both brachial," "both carotids," and both "axillary," the bellows sound could be distinguished almost equally plainly on either side. He had been drinking rather freely for a few days before his admission, and had had no sleep for two nights, and presented other slight symptoms of delirium tremens. Ordered, ℞ Tinct. digitalis ♏x., spt. æth. nitr. ♏xx., tinct. opii. ♏x., aquæ ʒj. ter. die. Empl. belladonnæ thoraci. He was placed on milk diet and beef-tea; a night draught of opium and sulph. ether was also ordered. He continued under treatment until the 24th, with some improvement in general symptoms; he rested better, suffered less severe pain, and gained appetite, and was allowed mutton-chop and potatoes. But his pulse was occasionally intermittent, and at times he suffered extreme distress of breathing. The left pulse was now observed to be softer and more "shotty," the right "smaller," and more "wiry." On the 24th, his brother, who was captain of a small trading vessel, came to London, and offered to provide for him and send or take him home, and as he was anxious to go, he was discharged "Relieved," "Incurable."

Case 2.—*Aneurism of the Arteria Innominata.*

(Reported by Mr. COOKE.)

William H., aged 51, was admitted into the *Dreadnought* on September 26, 1861. He looks ten years older than his stated age, has grey hair, and a pale, phlegmatic, and anxious aspect. Has been intemperate at times. Has just returned from Bombay, having been five months on the passage, and ill for three months, with pain in the head, neck, and shoulders. For the last eight days has had cough and hoarseness of voice. There is a very distinct murmur over the aorta and the arteria innominata, and much fullness of lower part of neck on right side, with distension of the veins. He was ordered tr. dig. with tr. camph. co.; and as he had a dislike for, and difficulty in swallowing solid food, was put upon milk, beef-tea, and arrow-root. September 30.—The breathing is now attended with a husky sound, and there is more or less aphonia. The murmur has disappeared, but the pulsating swelling is extending above the clavicle and over the trachea. The normal sounds, unduly sharp and clear, are heard over the base of the heart. October 2.—There had been much distress and sleeplessness, and he was ordered half-a-grain of acetate of morphia at night. 7th.—Tumour much more marked, and there is pain in the head and neck on moving. No perceptible difference between the pulses at the wrists, but there is none in the right temporal and facial. There is scarcely any impulse in right external carotid, but the subclavian pulse has its full force. Towards the middle of October the tumour increased, almost suddenly, to nearly double its former size, and the parietes were evidently very much thinner. He now could swallow but very little at a time, and with great difficulty; his powers were rapidly failing, and he was at times in imminent danger of suffocation. He died suddenly in a paroxysm of dyspnœa on the 17th. *Inspection.*—The tumour above the clavicle had completely collapsed. The clavicle and sternum were removed with some difficulty, in consequence of very firm adhesions. The lower wall of the tumour was in apposition with the inner end of clavicle and outer portion of first bone of sternum, and the former appeared somewhat eroded. On exposing the aorta and large vessels, the aorta was found to be perfectly free from disease, but there was a large aneurismal sac extending from the arteria innominata upwards. The tissue of the sterno-mastoid in front of the sac was filled with extravasated blood, and formed the anterior boundary of the sac, which had burst in this direction, thus explaining the sudden increase in size. On laying open the sac it was found to present, except at the point just noticed, the serous arterial lining, and the subclavian and carotid arteries were seen opening out of its outer wall. The latter vessel was traced along its entire course, and was pervious throughout, but flattened and compressed by the tumour. As the sac was injected at each pulse of the heart, the distension of the walls must have quite compressed the carotid, and prevented blood from entering it, thus accounting for the absence of pulse in the branches of this vessel. The subclavian, passing out of the sac at a different angle, received its full injection. There was nothing abnormal in the heart or its valves, and no indications of disease in lining membrane of aorta or large vessels.

Case 3.—*Aneurism of the Arteria Innominata.*

John R., aged 36, a well-developed man, was admitted into the *Dreadnought* on August 31, 1861. He had been ashore five days, and previously for six weeks on the passage from Cronstadt. Had felt ill for seven weeks, but had before enjoyed good health. Huskiness of voice came on eight weeks back, and a week after he was attacked with a strong cough and much expectoration, which was slightly streaked with blood. He did not notice the swelling in the lower part of his neck, but when coughing violently, had to place his hand where the swelling now is, from the pain which was induced. There is now a swelling, about the size of a hen's egg, which proceeds from behind the inner end of the right clavicle, which is slightly pushed forward. It pulsates violently, and has a distinct systolic bruit. The right pulse is much more feeble than the left, and there is an inequality in the two temporals. There is dullness on percussion over the upper bone of the sternum, inner third of clavicle, and cartilages of upper ribs on right side, and over these latter a marked double bruit, which diminished in intensity as the ear approached the base of the heart. He has been intemperate at times, but never drank much spirits. His cough is troublesome and croupy in character, and there is marked hoarseness with stridulous respiration. At times he has paroxysms of dyspnœa. There is some venous injection of capillaries of the cheek. He was ordered to keep in the recumbent position; to have ordinary diet with additional allowance of bread; to take a mixture of tr. ferri mur. with full doses of hyoscyamus; and ice was directed to be constantly applied to the tumour in a bladder suspended from

the framework of the bed so as just to rest lightly upon the tumour. September 11.—The ice has been applied at intervals since his admission, with the effect of diminishing the force of the pulsations, but not the size of the swelling. It had to be discontinued two or three times, as it seemed to produce giddiness of the head and numbness of the right arm. 18th.—The tumour is gradually extending over the trachea; the voice is becoming more affected; there is difficulty of swallowing, and at times urgent dyspnœa. The ice was now discontinued, and a belladonna plaster was applied over the tumour. October 4.—Impulse increased; ordered tinct. dig. in moderate doses, with tinct. camph. co. ℥j. three times a-day. 18th.—Complains of pain between the shoulders and at the top of the right shoulder. November 18.—Is still in the Hospital.

Case 4.—*Aneurism of the Thoracic Aorta.*

Peter McC., between 30 and 40 years of age, was admitted into the *Dreadnought*, June 22, 1860. About nine months ago he was seized with sudden aphonia, and cough, which continued, with marked intervals of intermission, for two months. His voice then returned, but the slight cough continued. Last week he was seized with pain in the posterior part of the left shoulder. There is a marked systolic bruit, and impulse, beneath the left clavicle, and dullness on percussion. The heart sounds are more audible in this direction than over the præcordial region. The pulse was also less marked in left than in right wrist. He is expectorating some watery fluid from the bronchial tubes; but there is no history of hæmoptysis, or family history of phthisis. He has been a free drinker of spirits. He was ordered a tonic, mutton diet, to keep strictly in bed, and ice to be kept constantly applied to the seat of impulse. The application of ice was continued with but trifling intermissions for more than a month, and rest and good diet persevered in, and the effect was to reduce the impulse materially, and render the bruit almost imperceptible. He one day, however, applied for leave of absence on the plea of having to look after some pecuniary affairs. It was granted, and he did not make his reappearance.

Case 5.—*Double Aneurism—Thoracic and Abdominal.*

William J., aged 50, a short man, of unsymmetrical, cramped configuration, with a pinched, aged aspect, and pale cachectic look, was admitted into the *Dreadnought* in August, 1860. He complained of symptoms of dyspepsia, such as constant pyrosis, pain connected with the process of digestion, but not referrible to any particular stage thereof, constipation of bowels, etc. The tongue was clean, moist, and flabby, the pulse was weak and small, and there was much loss of power, and emaciation. His aspect, and the history of persistent dyspepsia, led to the suspicion of malignant disease; but on careful examination of the abdomen no tumour or hardness could be detected; although had there been such, the flaccid, shrunken state of the belly was favourable to the detection. Various remedies were tried for the relief of the dyspepsia, such as bismuth in large doses, associated, first with soda, then with calumba; free relief of bowels by compound colocynth pill; the latter remedy producing temporary relief. Shortly after his admission he complained of distressing pain in the back referrible to a small point to the left of the spine, at the upper part of the lumbar region. This persisted, although lessened by the application of a belladonna plaster. On examining the abdomen, some weeks after his admission, a distinct, rather soft bruit was detected about an inch above the umbilicus, and this, coupled with pain at corresponding point of back, led to the supposition either of aneurism, or of deeply-seated tumour pressing on the aorta. The heart was examined at times, and its sounds were found to be feeble and indistinct; but there was no bruit. Towards the end of September he began to complain of pain at the lower part of the chest, which was worse during the night than day-time. He did not at any time complain of cough or dyspnœa, nor was there any affection of the voice. He now began to have more or less difficulty in swallowing his food; he felt as if things lodged in his throat, and deglutition occupied a considerable period. His emaciation and debility increased and his legs became somewhat œdematous. He died quite suddenly on October 7—becoming exceedingly pale and giving merely a few gasps—having ten minutes previously been seen in his usual state. *Inspection.*—The pericardium was found to be filled with blood, which had proceeded from a very large aneurism of the ascending aorta immediately above the valves, which had ruptured into the pericardium. The aorta was found to be studded throughout with atheromatous disease, and there was a considerable aneurismal dilatation of the abdominal aorta, at the point where it had been diagnosed.

Case 6.—A man, the notes of whose case have been mislaid, was introduced into the *Dreadnought* in the course of last summer. The only prominent symptom was paroxysms of intense dyspnœa, attended with lividity of face, in one of which he died. There were no physical or other signs pointing to aneurism. Inspection revealed a small aneurism of the thoracic aorta, which had produced the effect alluded to, by simple irritation of the pneumogastric nerve.

KING'S COLLEGE HOSPITAL.

(Cases under the care of Mr. HULKE.)

SLOUGHS OF THE SKIN OF THE MAMMÆ, PROBABLY CAUSED BY THE APPLICATION OF A MINERAL ACID.

Margaret F., aged 19, a well-nourished, good-looking servant maid, was brought by her aunt to Mr. Hulke's out-patients' room, on March 26, 1861, with two white leathery sloughs of the skin of the left breast. One, about an inch long and one-third of an inch wide, ran from the upper and inner side of the breast downwards and outwards to the nipple; the other, longer and wider, reached from the outer side of the nipple outwards, downwards to the most depending point of the organ. These sloughs were bounded by a narrow line of ulceration, beyond which the tissues were perfectly healthy. Her own account was that fourteen days previously her breast had been purplish and white where the sloughs now are, and that the sloughing resulted from her scratching these places.

On the 30th these sloughs, which had become rather yellow, were nearly detached, and in a few days more were shed, exposing a healthy granulating surface. The figure of the sloughs was just that which would have been described by a drop of fluid being allowed to trickle down the surfaces of the breast, and their general appearances so closely resembled those produced by mineral acids, that I could entertain no doubt of their real origin. The girl, however, adhered to her statement, and denied to have put anything to her breast.

BLOOD CYST IN CARTILAGE OF EXTERNAL EAR.

D. S., a prize fighter, aged 22, came to King's College Hospital on December 31, 1859, with an elastic rounded swelling of the external ear, which involved the whole of the cartilaginous portion of the auricle, effacing the concha and the fossæ of the helix and anti-helix, but leaving the lobule free. In December, 1858, the patient had been under Mr. Hulke's care with a similar condition of the ear, which he attributed to repeated blows; and Mr. Hulke, regarding it as a hæmatocele which had become inflamed, treated it by free incision. Bloody pus was evacuated. Poultices were used for a few days, and the wound seemed to heal soundly, only a slight hardness remaining. The swelling reappeared a fortnight before his second application. Mr. Hulke opened it by an incision one inch long, evacuated nearly one ounce of blood from a cyst with very dense wall one-third of an inch thick, and stuffed the cyst with lint with the object of inducing suppuration. The ultimate issue of this case is unknown, as the patient never returned to the Hospital.

A second case of this kind occurred in Mr. Hulke's out-patient practice, in September, 1860. These cysts, he remarks, are formed within the fibro-cartilage, which they split into two layers. They acquire considerable thickness, and bony plates are occasionally found in those of old standing. In most cases their origin is traceable to an injury. They have been said to occur not unfrequently in lunatics.

POLYPUS OF THE RECTUM.

Joseph B., aged 14, an undergrown boy, with a blanched, waxy complexion, applied at King's College Hospital on March 19, 1861, on account of bleeding from the bowel, and the protrusion of "a small round body" at stool. This first occurred four months previously, and since then defecation has constantly been attended with loss of blood. The finger passed into the

rectum detected a polypus, the size of a small cherry, hanging by a slender stalk, about one inch long, from the posterior wall of the gut, about an inch and a-half above the internal sphincter. Whilst attempting to pull down the polypus with the finger through the anus, the stalk snapped through. This was unattended with bleeding. No more hæmorrhage occurred at stool, and in a couple of months the boy had quite lost his bloodless appearance.

The polypus consisted in main part of a congeries of tubules, lined with columnar epithelium very like "Lieberkuhn's follicles." They had no definite arrangement, but formed a tangled mass. A small quantity of connective tissue, and an intertubular capillary plexus, constituted the remaining elements.

The minute anatomy of this specimen agrees with that of one described by Paget in "Lectures on Surgical Pathology," vol. ii. p. 104.

WART AND CORN OF THE MUCOUS MEMBRANE OF THE TONGUE.

John R., aged 46, a healthy man, of temperate habits, and never syphilized, came to King's College Hospital, on February 9, 1861, as an out-patient, with a prominent circular mushroom-like wart on the dorsum of the tongue, to the left of the middle line. Its diameter was about three-quarters of an inch; its elevation at the centre was one-quarter of an inch, and at the circumference one eighth of an inch above the level of the chorion, to which it was attached by a constricted neck. Its surface was dotted over with red papillæ. The mucous membrane immediately around this wart was perfectly natural, and without any induration, but a slight distance from it, over a large extent of the dorsum and left side of the tongue near the apex; the natural soft mucous membrane was replaced by an opaque yellowish-white patch resembling sodden kid leather, of irregular outline, shelving from the centre to the edges. Its greatest thickness was one and a-half lines. It was quite insensible, and the man was in the habit of paring it down with a razor when it became inconveniently thick. Mr. Hulke cut off the wart and a portion of the leathery patch, applying nitrate of silver freely to the remainder with the object of causing exfoliation. Examined under the microscope, the wart was seen to consist of colossal papillæ; those of the filiform kind rivalled in dimensions those of feline animals. The leather-like portion was composed entirely of epithelium. The deepest cells were transparent and natural; the more superficial were granular and opaque; and those forming the surface were felted into dense opaque masses. The two conditions were evidently analogous to wart and corn of skin.

COMPLETE ATROPHY OF THE TESTIS FOLLOWING ABSCESS.

Benj. P., aged 36, a modeller, a spare, sallow, dissipated fellow, became an out-patient at King's College Hospital in March 1861, with syphilitic laryngitis, and ulcerations in the fauces and left tonsil. Several years previously he had had sores on the penis and bubo, and in 1857 had been an in-patient under Mr. Partridge with nodes and abscess in the left testis. At the present time the left side of the scrotum bears the scars of several former sinuses, all of which lead to a hard cord that ends in a hard knot the size of a large bean, quite at the upper part of the scrotum near the external abdominal ring. This is evidently the wasted testis. His right testis is very small and soft, but the patient has not lost venereal desire.

NORTHAMPTON INFIRMARY.

RUPTURE OF THE URINARY BLADDER—DEATH—AUTOPSY.

(Under the care of Mr. TERRY.)

[Reported by Mr. GRAY, House-Surgeon.]

J. C., aged 14, was admitted on August 15, 1858, under the care of Mr. Terry. About four o'clock in the afternoon of the previous day, while driving a heavily-laden waggon, the horses suddenly started and knocked him down, injuring the right thigh and the abdomen. He was uncertain whether the wheels passed over him or not, and no other person was present when the accident occurred. In a few minutes he was picked up. He complained of great pain in the upper part of the thigh and in the groin, and was taken home, a distance of two miles, in a cart. A Surgeon was summoned immediately, but did not arrive till the following morning; the boy, meanwhile, having had a sleepless night, and having passed no water. The Surgeon, after passing or attempting to pass a catheter, advised his removal to the Infirmary, where he arrived about twenty-four hours after the accident. On admission he complained of intense abdominal pain, and looked pale, collapsed, and very distressed, the countenance being pinched and haggard. The abdomen was much swollen and exquisitely tender, tympanitic, and marked on the left side by a large broad patch of ecchymosis. The upper part of the left thigh also was much contused and swollen, but not fractured. The scrotum was greatly swollen and ecchymosed, and there was so much phymosis from œdema of the prepuce as to occasion great difficulty in finding the meatus urinarius with the catheter. Pulse 120 per minute, and very feeble; skin cool; intellect clear; neither urine nor fæces had passed since the accident. A flexible catheter was at once passed without encountering any obstacle till it appeared to be fairly in the bladder, its point being distinctly felt per rectum beyond the membranous urethra; yet the handle of the instrument could not be properly depressed, and no urine was evacuated. The catheter was, however, fastened in, the abdomen was diligently fomented, and he was ordered wine and a grain of opium every four hours. An incision an inch and a-half long was made in the mesial line of the infiltrated scrotum.

16th.—Had retained very little opium, vomiting, which had set in a few hours before admission, having been constant through the night; had scarcely slept during the night, and complained urgently of pain; only a few drops of urine coloured with blood had escaped by the catheter, and the abdomen was more swollen and the ecchymosed patch was increased in size and covered with vesications. The pulse was thready, and could not be counted, and the patient was occasionally delirious.

17th.—All the symptoms were unrelieved; the vomiting constant, the pain very intense, and he was very restless, irritable, and prostrate. Ammonia had been given with the opiate, and brandy, wine, lemonade, etc., as freely given as the patient's wishes varied, but all had been speedily rejected by vomiting. No urine had passed by the catheter, and the bowels had not acted.

18th.—Remained much the same, with a still more largely distended abdomen, till three o'clock this morning, when he ceased to complain, and began to breathe with difficulty, his delirium passing into quiet stupor, and the extremities becoming cold, vomiting ceasing, and nourishment being refused. At 9 a.m. on the following day he was pulseless, with cold clammy extremities, and at 10½ a.m. he died.

Autopsy, Eight Hours after Death.—The rigor mortis was well marked; the abdomen on the right side was marked with a livid ecchymosed patch covered with vesications; scrotum large, ecchymosed, and tense, the incision into it being gaping, and exposing a large jelly-like mass of infiltrated areolar tissue of a brownish-yellow colour. On removing the skin from the abdominal walls, the subcutaneous tissue was found swollen, softened, infiltrated with sanious watery fluid, smelling strongly urinous, and of all colours, from ashy gray to dark purple and brown. The abdominal muscles were softened, thickened to thrice their ordinary dimensions, and sloughing, these changes being progressively less noticeable proceeding *from* the skin *towards* the peritoneum, the portion immediately contiguous to the serous membrane being quite healthy. The intestines were largely distended with flatus, and did not present any marked indications of peritonitis, their coils being all non-adherent, and their serous membrane not at all vividly injected. All the tissues in connexion with the posterior boundary of the abdominal cavity were of a dark bluish-brown colour from sub-peritoneal sloughing, and this appearance was observable even in many coils of the small intestine. The peritoneum generally was smooth, but dark coloured from the change in the subjacent tissues, being especially discoloured toward the pelvis, and becoming quite healthy in appearance toward the diaphragm. When the intestines were removed, the bladder

could not be seen, the front surface of the rectum being in contact with the soft swollen tissues behind the pubic arch. A sound being carefully passed, its point was felt deep in the pelvis, and on section of the right os pubis and dissection downwards through a depth of at least two inches of sloughing cellular tissue, the bladder was discovered, contracted and empty, and not much larger than a hen's egg. On opening it, its mucous surface seemed healthy, but on the left side of its base, about an inch or less from the entrance of the urethra, was a rent, round in form, with soft, pulpy, sloughing edges, and of such a size that the index finger passed rapidly through it into the mass of infiltrated tissue beneath. The urethra was healthy, and the perineum not implicated in the extravasation.

THE PROPRIETORS

Have decided, in consequence of the Repeal of the Paper Duty,

TO

REDUCE THE PRICE OF THIS JOURNAL.

In coming to this decision, the Proprietors follow the example so extensively set by the Public Press, and they trust that the Medical Profession will view with favour this response to the suggestions and inquiries of many Subscribers.

From JANUARY 1, 1862, the Price of

THE MEDICAL TIMES AND GAZETTE

WILL BE

UNSTAMPED, *Sixpence*; STAMPED, *Sevenpence.*

Medical Times and Gazette.

SATURDAY, NOVEMBER 30.

"INFIDEL TENDENCIES."

IN a recently-published volume of "Miscellaneous Lectures and Reviews," by the Archbishop of Dublin, is a most able lecture on "The Influence of the Professions on Character." In considering the influence of the Medical Profession, he alludes to the popular belief (less prevalent now than formerly) that Medical men are especially prone to Infidelity, and even Atheism. Notions of this kind are not necessarily true because they are popular. Some popular notions on Medical subjects are utterly untrue. It is a popular notion, for instance, that Doctors are more proof against contagion than other people. How far such a notion is *correct*, our Profession knows to its cost. But, though popular notions are sometimes utterly untrue, there is no doubt they *generally* contain *a certain amount* of truth; and this the Archbishop thinks is the case with the notion that Medical men are especially prone to Infidelity. "In a question of fact such as this," he says, "open to general observation, there is a strong presumption afforded by the prevalence of any opinion that it has at least some kind of foundation in truth." Without endeavouring to determine the *amount* and *extent*, present or past, of infidelity in our Profession, he offers what seem to us some very sensible conjectures as to its *cause*.

Certain peculiarities, he thinks, are to be found in the calling of a Medical man, which, unless guarded against, are apt to exert an influence more or less subversive of his religious belief.

In the first place, a Medical Practitioner, as a rule, has no Sunday. The calls of his Profession very often do not allow him to attend public worship, or, indeed, to observe his Sunday at all differently from other days. The evil of this is twofold:—(1.) The advantage, whatever it may be, of public worship is lost. Now, rating this advantage at the very lowest, one is bound (observes the Archbishop) to admit this much; that, independently of any edification derived from the peculiar religious services which men respectively attend, the mere circumstance of doing something every week *as* a religious observance must have some tendency to keep up in their minds a degree of respect, rational or irrational, for the religion in whose outward observances they take a part. (2.) When a man is habitually absent from public worship because he *cannot* attend, he is very apt to absent himself when he *can* attend; just as "a man placed in circumstances which interfere with his forming or keeping up domestic habits, or literary habits, or habits of bodily activity, is likely to be less domestic, less literary, more sedentary, than his circumstances require."

In the second place, his Profession makes him familiar with death. The danger of such familiarity is this; that unless the instances of others' mortality lead him to live and act with a practical regard to his own, they merely serve to render him more and more insensible both to the sight and idea of death. The Medical man, again, is constantly regarding death from one particular point of view, viz., "As the final *termination* of that state of existence with which alone he has *professionally* any concern." Now the habit of *thus* contemplating death must have a tendency to divert the mind from contemplating it in any *other* light, *e. g.*, not merely as the termination of this life, but as the beginning of another.

In the third place, he is apt to find a stumbling-block in certain physiological and metaphysical theories (the immateriality of the soul, for instance,) which he receives—perhaps of his own accord, perhaps on the authority of some eminent Divines — as part of the Christian Revelation or as essentially connected with it. Such theories "pass muster with the generality of readers and hearers, and, however unprofitable, may be to them at least harmless." Not so with Medical men. *They* know enough physiology to perceive the unsoundness of the arguments by which some of these theories are supported, and are apt to conclude that, since the theories are unsound, the religion of which they are assumed to form a part must be unsound also. They forget that such theories are by no means an essential part of revealed religion; that the Scriptures say nothing about them; and that, consequently, their irreconcileability with known physiological truths need not stagger their religious faith one iota. "It is much to be wished," says the Archbishop, "that religious persons would be careful to abstain, I do not say from entering on any physiological or metaphysical speculations (which they have a perfect right to do), but from mixing these up with Christianity, and making everything that they believe on matters at all connected with religion a part of their religious faith."

Fourthly, it is rather a common belief with many people, and even with some professed divines, that the mode of a man's death, according as it is peaceful or troubled, is a sure criterion of the goodness or badness of his previous life. Now Medical men know by experience that this is not the case. They find as a matter of fact that a dying person's state of mind is influenced just as often and just as much by the disease of which he is dying as by thoughts of past life and future prospects. Hence, when they see professed divines confidently stating things which are at variance with facts coming under their own experience, "they are in danger of drawing conclusions unfavourable to the truth of Christianity if they apply too hastily the maxim of *peritis credendum est in suâ arte;*" if, in other words, they judge of the truth of their religion by the hypotheses of all who profess to teach it.

Such, very briefly, are the dangers to which the Archbishop considers Medical men, from the nature of their calling, to be peculiarly exposed. We are glad to find that a man, who, besides being himself a "divine," is con-

fessedly a sagacious observer, and a cool, cautious, clear-headed reasoner, has not only thought the subject worthy of his consideration, but has also publicly stated the conclusions at which he has arrived. How far these conclusions are true, each one of us can tell, in his own case, by appealing to his own experience. For our own part, we believe the dangers just pointed out to have a real existence; but we believe, at the same time, that the great majority of Medical men are too much *alive* to their existence to fall into them. They *may* be, and, unless they resign their independence of thought, always *will* be, free thinkers on religious matters; but the mass of them are far too well informed to be or to become Infidels or Atheists.

Before dismissing this subject, we may as well mention a few other notions which are commonly adopted as a part of popular religion (or, to speak more correctly, of popular religionism), but which are contrary to sound physiology. They tend, therefore, to discredit in the eye of the physiologist the religion to which they are appendages. Grief, indeed, is it to destroy the poetical dreams from which many pious minds receive consolation, yet they are but dreams.

What, for instance, are the naked facts respecting the smiles of newly-born infants? Alas! the physiologist ascribes them to causes terrestrial indeed; and knowing this, we confess that there is a sickening sense of disappointment which creeps over us when we read that exquisite poem in Keble's "Lyra Innocentium," in which these smiles are ascribed to angelic promptings, or to the recollection of paradisaical bliss enjoyed by the spirit before it entered the human body at birth:—

> "But did the smile disclose a dream
> Of bliss that had been his before?
> Was it from heaven's deep sea a gleam,
> Not faded quite on earth's dim shore?
>
> "Or told some angel from above
> Of glories to be his at last,
> The sunset, crowning hours of love,
> His labours done, his perils past"?

The physiologist is tempted to doubt the inward soundness of a structure whose outward ornaments are so false, though beautiful, as these.

We have mentioned the subject of "death-bed scenes." The physiologist who is tempted to read "tracts" and popular religious literature will see with regret to how great an extent the describers of such scenes draw upon their imagination for their facts, and how thoroughly unreal and conventional are many of the descriptions (a). Consumption, for example, is painted in such uniformly rose colour, as if it were such a gentle, easy death, and affording scope for the display of pious sentiments. Not one word of the terrible sufferings from want of breath, the agonising restlessness, and occasionally, it must be said, the pardonable querulousness and impatience. The Portuguese call it the "death of the elect;" and a most learned and estimable clergyman, the Rev. J. M. Neale, in a small volume of "Hymns for the Sick," adopts the Portuguese idea.

Religion is further discredited in the eyes of the physiologist by the readiness with which hysterical symptoms are regarded as proofs of Divine inspiration or miraculous interposition. The end of the matter is, that truth is to be sought at all price; and that the sober prosecution of physiology, though it may disgust us for a time with the false ornaments and appendages of religion, will in the end react upon the religious opinions of the masses, and purify them from any adventitious notions with which human frailty may have loaded them.

(a) We are glad to recommend to our readers a rational and manly discourse on the misehiefs which follow from the exaggerated records of conventional "death-beds." It is in a Sermon called, "Peace at the Last," by the Rev. Edward Miller, of Bognor. If all religious writings were so true as this, there would be less complaint of "infidel tendencies" amongst ourselves.

COLNEY HATCH.

We little thought when writing our last leader that before the ink was dry we should have to record *another homicide* at Colney Hatch Asylum, nor were we aware how true were our last hurried words, that this casualty was a practical commentary upon our article. On Tuesday, November 12, Joseph Bigg, an inmate of No. 14 ward, was, about ten minutes to five o'clock in the afternoon, found strangled by a handkerchief tied tightly round his neck. In delivering their verdict the jury empanelled by the Deputy-Coroner, Mr. Brent, expressed a "hope that in future the instructions of Mr. Tyerman for the dispersion of attendants throughout the ward of which they have charge should be more carefully carried into effect." If all came out which rumour insinuates, the jury have handled some of the parties in this matter very gently. Is it true that a fortnight previously the attendant in charge of No. 14 had been reported to the Committee of Visitors for a neglect of duty, which even then was within an ace of resulting in a homicide; and that on the very day, and within a few hours only of the homicide we now record, that man was absolutely restored to his post by the Committee who investigated the complaint? We ask, Is this true? We do sincerely hope that this question may be answered in the negative. We hope so for the sake of the attendants, for the credit-sake of the Visiting Committee, who really take upon themselves by their arrangements the moral responsibility of every casualty which occurs; and, above all, for the sake of humanity and of the miserable creatures immured in Colney Hatch Asylum. "The instructions of Mr. Tyerman for the dispersion of attendants throughout the ward" to be carried into effect. By whom? Who is to see that they are carried into effect? Why were they not carried into effect before? These are questions, at all events, which there can be no difficulty in answering. The nominal superintendents at Colney Hatch are only nominal masters even of the attendants. They neither engage them, nor have a voice in their engagement, nor are they consulted in their selection or as to their qualifications. Neither can they dismiss them when found incompetent, or even remove them from a post of higher to one of lower responsibility. Of course, the Committee of Visitors will hold an inquiry of their own, which cannot be expected to result in self-condemnation. But there is another inquiry which must be held, in which the Commissioners in Lunacy will be the judges; and still another Court, which in this free country is superior to every other—namely, that of public opinion, before which superintendents, attendants, Visiting Magistrates, and Commissioners will all be arraigned.

We have no desire unnecessarily to rake up a by-gone event, but it was only on the 12th of May last year, that William Swift, an inmate of No. 11 Ward, died from the effects of injuries he had received, and in this instance inquiries were instituted, and the Commissioners finally carried the case into the Central Criminal Court, in the form of an indictment for manslaughter against two of the attendants. These men, after a protracted trial, were acquitted. And now what followed? The Tenth Annual Report of the Committee of Visitors shall speak:—"The Committee felt that they had not been put in possession of all the facts attending this lamentable case, and upon the termination of the trial, they passed the following resolution:—"That the evidence given by Mr. Tyerman at various times, respecting the death of the patient Swift, and his conduct with reference to that event, having been maturely considered, the Committee regret that they feel called upon to declare, that Mr. Tyerman no longer possesses their confidence." On this being communicated to Mr. Tyerman, he addressed a letter to the Committee, which resulted in the Committee suspending

further action on their resolution. This letter, however, is not published. Fair play one would think would have urged a Committee of gentlemen, after placing such a resolution as we have quoted in their public Report, not to have withheld Mr. Tyerman's exculpatory letter from equal publicity. But still Mr. Tyerman was given an opportunity of "regaining the confidence of the Committee." This gentleman has since resigned his office, and is only now holding it until his successor can enter on his duties. Happily for that successor he has not yet undertaken them. Thus, however, has the county lost an earnest, experienced, painstaking, honest, and hard-working officer from Colney Hatch Asylum. It is rumoured that the sacrifice having been accomplished, the *amende honorable* has been partly made to this ill-used officer by a vote of money to be presented to him on his retirement.

No good object, however, will be gained by further remarks upon this personal matter. We must recur to the public interest, and ask, How much longer this state of things at Colney Hatch is to continue? How many more homicides are to be perpetrated before Parliament interferes between the Middlesex Magistrates and the unfortunate inmates of their pet establishment? How long are these gentlemen, highly estimable in their private capacity, but who can by no possibility know anything about the proper treatment of lunatics, to be permitted the exercise of functions which the Act of Parliament has wisely committed to other and more fitting hands?

THE WEEK.

A PICTURESQUE old town may generally be described as being pretty to look at, but hateful to live in. This applies especially to the Old Town of Edinburgh, whose picturesque High-street most of us have visited and admired, with no wish to remain there. The enormous, closely-packed houses, once the residence of the wealthy classes when civil discord rendered fortifications necessary, have long been tenanted by swarms of humble occupants, who are glad to get shelter in any house, no matter how ruinous or unwholesome. At last, one of these crazy edifices has fallen in; about twenty-nine persons have been crushed to death, and an equal number seriously bruised, and now "something will be done." The house which fell was eight stories high, about the middle of the High-street on the east side, and about 300 years old. It did not fall without warning, for the occupant of the ground-floor observed a serious crack in the ceiling on Saturday afternoon, and called in a surveyor, who, like an unskilful Physician, said that the derangement was functional merely, and that there was no cause for alarm. But within twelve hours the whole fabric sunk down into a heap. They manage things somewhat better in London; the police surveyors have ample powers under the Building Act to enter, survey, and cause to be shored up, any building reported dangerous, and even to cause it to be pulled down if need be; and these powers have been unflinchingly exercised. In very many instances the Police Surveyor has been called in by Medical Officers of Health, in the hope of getting squalid old buildings pulled down which there are no means of rendering wholesome. We hope to hear of an active sanitary and architectural survey of the Old Town of Edinburgh.

The pauper children of the Unions of the Central London District, 1148 in number, are placed at a school at Hanwell, and, as reports were prevalent that the health of the children was not good, and that it was much worse than at the other pauper schools around London, the Guardians instituted an enquiry into the facts, with the Professional aid of Mr. Haynes Walton. A large proportion of the children were found labouring under itch and other cutaneous diseases, and about 200 of them from a mild form of catarrhal ophthalmia. The causes appear to be a deficiency of warmth, and injudicious and excessive system of ventilation, by means of which the children, whilst in bed, are exposed to currents of cold, damp air. The Committee endorse Mr. Walton's recommendation of greater warmth, flannel jackets, and liberal diet. They further call attention to a recommendation of Mr. Bowman, who was called in during a former epidemic (although his advice was not acted on), that a better class of nurses should be provided to secure "skilful, kind, and unwearying attention" for these poor children; and they conclude their report with the following words, which we heartily commend to all Poor-law Guardians and Governors of Schools throughout the country:—

"The Committee regard the children now inmates of the District Schools as future paupers or criminals, or as honest and independent labourers. If the last be the result, which the Committee earnestly hope will be the case, any amount of expenditure now will be judicious and evidence of good economy. But if from an injudicious withholding of such expenditure now, to show some pecuniary saving, either of the two former results should follow, then every penny spent now is unwisely spent, and the expense of maintaining these poor children, and in all probability their children, as paupers or criminals, will be a necessary consequence of present parsimony and injudicious management."

The Society for Preventing Cruelty to Animals is a well-meaning Institution enough, but, like similar bodies, is apt to commit great absurdities. Last week a gentleman was summoned by the Society before the Edmonton Bench of Magistrates, for alleged cruelty to a horse. He had attempted to subdue a very vicious animal, by tying it up, and depriving it of food and rest for five days, with the exception of water. The owner of the horse admitted the facts frankly enough; stating that he had tried every other possible method of taming it, and at last made a deliberate experiment with starvation. Professor Spooner, who was called by the Society, deposed to the cruelty of the practice, and said that horses, having very small stomachs, ought to eat often; that it was better to kill a horse than to attempt to subjugate it by starvation. The Bench, however, were not inclined to adopt this view, and dismissed the summons. A deliberate and well-considered plan for making an animal useful, instead of killing it, is very different from "cruelty," in the ordinary acceptation of the term.

A deputation headed by Mr. F. Doulton has waited on Lord Palmerston, urging on the Government that the embankment of the South side of the Thames should not be delayed. Great stress was laid on the evils arising from sewer-floods. Mr. Brady, M.P., said, from a knowledge of the locality, he could bear testimony to the state of the district. He had witnessed, not more than 100 yards from the river, houses with from four to five feet of water in their cellars, with vessels of all kinds floating about, and the people themselves in the most wretched condition. We heartily coincide with the prayer of the deputation.

Yet another military murder at Aldershott! A young desperado, a bad subject, who had been in confinement for mutinous conduct and for selling his kit, takes a loaded rifle and shoots a sergeant, whom he kills, besides inflicting a dangerous wound on a corporal. He had been in prison for six months, and was determined to have his revenge. Worse still, he threatened another sergeant that his turn would come when one of his comrades, now in prison, should be released. By all means, let the ammunition be placed in safe keeping; and if a soldier commits a cold-blooded murder of this kind,

let him be tried by a drum-head court-martial, and ignominiously strung up on the spot. But this would not work a radical cure." Mr. T. Pain, the Coroner who held the inquest on the murdered man, said—

"It was not only that these men either destroyed their officers or non-commissioned officers for some injury, fancied or otherwise, but (as his experience had shown him) they often returned to barracks dreading punishment, or out of spirits from some cause or other, and destroyed themselves. In his official capacity he had repeatedly held inquests in cases where soldiers had taken their rifles, loaded them, and destroyed themselves. In this state of affairs it was absolutely essential, for all their sakes, that some stringent alteration should be made."

We have had this week more than the usual number of county speeches at agricultural meetings. At one of them Mr. Walter, speaking on the subject of cottage improvement, observed that it was commonly said that it *did not pay*, in reply to which he asked, pertinently enough, which of the objects of any man's private expenditure does pay? Do horses or dogs? or pictures? or noble mansions, parks, hot-houses, or any other thing that a man takes pleasure in? Certainly they return no pecuniary profit, but they give a man something that he values even more. May the day soon come when the landed proprietors of England shall prefer the sight of a sturdy, healthy, moral peasantry to any objects that merely please the taste. At another meeting Mr. Walter said:—

"Sufficient attention has not been paid to the breed of agricultural labourers. It might be said that that was a matter of which they could take care themselves; but when he told them that there were parishes in the county in which scrofula prevailed to a frightful extent among the labouring population in consequence of frequent intermarriages, it really became a serious question whether something could not be done to put a stop to that practice. In some villages they would find that perhaps half-a-dozen names sufficed for the whole population—(hear, hear)—indicating the extent to which the families were connected by marriage; and wherever this was the case the same result happened which would happen if any breeder of stock were to pursue a similar course by perpetually breeding in and in,—viz., a gradual but certain deterioration. This really was a very serious matter, and no landlord could do a better service than by importing a fresh breed of labourers into such places."

At a meeting of the Book-hawking Union at Oxford—a Society for promoting the sale of useful books amongst labouring folk in the country—Professor Acland read an admirable paper on "Cottage Wall Prints." He spoke of the universal love of ornament, and of the delight which persons of all classes take in decorating the walls of their apartments, and of the manner in which this natural predilection may be made to contribute to instruction, pleasure, and even moral and physical benefit:—

"Why may not our sick poor have the satisfaction of noble and peaceful thoughts set before them, not only in their ordinary homes, but also during extreme poverty and old age in our workhouses, or in their house of sickness—when crushed by fevers or by accidents in Hospitals? Why should the walls of an Hospital be of a dirty brown yellow, and bereft of every air of comfort? Why should a poor girl through a long lingering illness be day by day in a ward quite alone but for the visits from her attendants, and see nothing but these words in huge letters on the dull wall?—'Hear my complaints, for I am brought very low.' Is not her complaint graven deep enough? is she not so low but that ever and ever 'I am very low' is to be forced on her weary brain? Once a sick woman was addressed, as we heard, 'Daughter, be of good cheer,' and that, too, when she was healed. When 'the body is sick, and the whole heart is faint,' be careful what you place to be impressed on the sufferer's brain. The Physician may certainly ask that the warms rays of cheerfulness may come into the sick room—and may beg that you will give an impulse to the seemly adorning of the dwellings of the poor, be it in their permanent or in their temporary homes."

"What is to be done in the following case? Are we to demand that the *State* (*i. e.* a power *above* the people, and separate from them, not of them,—an idea hateful to Englishmen) shall interfere and prohibit manufacture? Ought not rather the "protection" requisite to be sought by good education, so that persons knowing a trade to be dangerous, may protect themselves by refusing to embark in it? How can the *State* hinder ninety-eight young women from destroying themselves for a beggarly livelihood? Certainly the *parish*, the portion of the community injured if the workpeople are disabled and thrown upon public funds, might interfere, and we hope to hear of proceedings taken by the Medical Officer of Health for St. Pancras:—

"On Tuesday an inquiry was held by Mr. G. S. Brent, touching the death of Matilda Scheurer, a good-looking girl of 19, who died from poison imbibed into the system during her engagement in the manufacture of artificial flower leaves. Mrs. Louisa Scheuer, a widow, and mother to the deceased, deposed that on Thursday week her daughter was taken ill. She was seized with vomiting of green stuff. The witness took her to a Doctor on the following morning, who told her she was suffering from the effects of poison. She had been ill several times before, complaining of pains in the stomach and sickness, for the last year and a half. She was engaged as an artificial florist in the warehouse of M. Bergerond, of Judd-street, Brunswick-square, and up to the time of her death she had been engaged in the leaf-making. She was in the greatest pain until she became insensible, when death put an end to her sufferings. Mr. James Thomas Paul, Surgeon, of 26, Burton-crescent, said he had attended the deceased four times within eighteen months, while suffering from the same causes. He had made a post mortem examination, and found that the lungs gave evidence of the presence of arsenite of copper, the liver being highly impregnated, as also the mesenteric glands. The cause of death was acute inflammation of the mucous membrane of the stomach, produced by the inhalation of the arsenite of copper. A sister of the deceased had died under similar circumstances. Mr. Bergerond said he employed ninety-eight girls in his establishment, and for their protection he had suggested the wearing of masks, but it was objected to by them as producing excessive heat. They, however, wore muslin over their mouths. It was stated by a juror that the arsenite of copper in such manufactures was prohibited in France, as injurious to workpeople. The jury returned a verdict to the effect that the deceased died accidentally, from the effects of mortal disease in her stomach and other organs, occasioned by arsenite of copper used in her employment."

The *Cork Herald* of November 12 gives an account of a discussion at the Cork Dispensary on the general quality of the drugs supplied to that Institution, and especially, on the use of methylated spirit. This, as we need scarcely tell our readers, is alcohol, flavoured with a nauseous and inseparable kind of resin, and manufactured at a nominal duty for varnishes and similar uses in the arts. Nevertheless, it is used by the Druggists who prepare "cheap" medicines, for the preparation of chloroform, and of tinctures, and other medicines for internal use. It is alleged that some stuff supplied to the Cork Dispensary as ipecacuanha wine was prepared with a mixture of methylated spirit and water coloured with burnt sugar, and contained no wine whatever. The Cork paper tells us that at the Dispensary meeting,—

Mr. Atkins, late contractor for medicines, laid before the Committee the following opinions on the use of "Methylated Spirit" for tinctures, instead of spirit of wine or alcohol:—

From Doctor Purcell O'Leary—"The only disadvantage which may attend such admixture is the comparatively unpleasant taste or smell of naphtha, which, however, in the minute doses is hardly perceptible."

Doctor M'Evers—"The tinctures you have mentioned, when made with methylated spirit, are in every respect as useful as when made in the ordinary way."

Charles Leslie, Druggist, Dublin—"I never use it, but I believe it to be innocent. But in the forms of H.M.R., as sanctioned by the Poor-law Commissioners, it is admitted and required to be tendered for."

James Bankhead, of Liverpool—"Our house, by permission of the Medical Officer, has supplied none but methylated tinctures to the West Derby Workhouse."

Our own opinion in the matter is, that it is palpably wrong and indecent. In the first place it is really most hazardous to use in the manufacture of chloroform any substance which may possibly influence the composition of an agent so potent, and, if ill-prepared, so deadly. It is a cruelty and fraud to give to a sick stomach a medicine prepared with spirit to which a disgusting taste has been purposely communicated. The use of such spirit is a violation of the spirit, if not of the letter, of the law, and is altogether a shabby, demoralizing business, and a very bad precedent.

A motion was made lately at the Kenmare Board of Guardians to reduce the salaries of the Physicians. It was opposed by Dr. McCarthy, one of the Physicians, in a long and touching speech, from which the following is a characteristic extract :—

"I tell you sincerely, gentlemen, that I hold in abhorrence not alone the position, but the very name of a country Dispensary Doctor, and I assure you without exaggeration, that if I had as many sons as old Priam of Troy had children, that is, a hundred, and they were all Doctors, I would send them all round the world to every point of the compass, to the North and South Poles, to the mountains of the moon, and of the sun too, if such existed. I would trust them amongst the wild beasts of the jungle, or the cannibals of the wilderness, ay, or amongst those new relatives of man, the Gorillas, sooner than allow one of them to become a common country Dispensary Doctor. (Laughter.) These have always been my sentiments, and you may fairly ask me—Why I ever became one, and why I continue to hold the situation ? To the first I say, May God forgive me for having done so, and if a long and sincere repentance be an expiation for one of the greatest errors of my life, then, indeed, I am forgiven. To the second, I reply as usual—It is my necessities, and not my will, that consent."

"*Fortes creantur fortibus et bonis.*" The New York correspondent of the *Guardian* augurs well of General M'Clellan if he be his own father's true son. "If he inherit the characteristics of his father, he will hardly fail to take the offensive, and move with vigour and rapidity. Dr. M'Clellan, of Philadelphia, was a Surgeon of eminence ; but what he was chiefly famous for, was a very bold style of operating. He was a man of genius, ambitious and aspiring. The son has the ambition of his father, and also, we must hope, his audacity, but a greater measure of caution."

Although H.R.H. the Commander-in-Chief has given his sentence that the complaints made by the mutinous cadets at Woolwich are frivolous and without foundation, we hope that further inquiries will be made by authority of the House of Commons. *Nemo repentè fuit turpissimus.* The Woolwich cadets *were* promising and well-behaved gentlemen. Who or what has made them turbulent and unruly ? If the statements made by a "Father" in the *Times* of the 26th inst., be true, a little knowledge of human nature will enable anyone to answer that question. Speaking of the culprits, he says :—

"Before they were cadets at Woolwich they were among the most promising pupils of our great schools, enjoying a large amount of liberty, and encouraged to exercise themselves daily in all kinds of manly games and exercises, which left them little time or desire for smoking or card-playing. As soon, however, as they were transferred to the care of the governor of Woolwich, they found themselves deprived of all liberty—debarred from every kind of athletic game and exercise, and penned, to the number of about 200, in a large yard, without any means of relaxation or amusement, save such as they could derive from the illicit resources of cards and tobacco. Their predecessors had, indeed, enjoyed the limited advantages of a racquet-court and a gymnasium—advantages denied to the present race of cadets at Woolwich. If these young men, thus mismanaged, have gone astray, I ask, Who ought in fairness to be punished for it—the misgoverned or the misgovernors ?"

At a meeting of the Pharmaceutical Society held on the 6th, the President, Mr. Squire, read a Paper on "Medicinal Extracts, taking Extract of Belladonna as an Example."

The object of the Paper was to point out that the process for the preparation of the so-called "green extracts," given in the London Pharmacopœias from 1809 to 1851, was never followed by the manufactures of those extracts on a large scale ; and, further, that the plan which is adopted by the manufacturers is decidedly the better. Mr. Squire tested the different processes with some belladonna. The plant arrived at maturity in September this year, and was then cut, and immediately used. From this plant three extracts were made, one from the leaves only, as directed in the Pharmacopœia, another from all the soft parts (the plan adopted by the manufacturers), and a third from all the soft parts, except the leaves. The first became mouldy in ten days. Both the other were good extracts, which kept well. To test the effects of the extracts, Mr. Squire placed specimens in the hands of some eminent Ophthalmic Surgeons—Mr. Wordsworth, Mr. White Cooper, Mr. Dixon, and others—for trial, and they all reported that the extract made from the soft parts without the leaves acted most powerfully and rapidly in dilating the pupil of the eye. Mr. Squire concludes, therefore, that the most active and best keeping extract is made from the whole of the soft parts of the plant—a fact which applies to extract of henbane and other green extracts as well as belladonna. Another reason for adopting the manufacturers' plan was, that when the Pharmacopœia process was followed, there was a loss of one-third of the useful constituents of a plant.

Mr. Deane said that *à priori* it was a serious mistake to reject the succulent stalks of plants like belladonna in making exracts, for the sap passed from the leaves to the stems, and there formed active substances.

Mr. Heathfield said that the juice from stalks contained as much active matter as that from leaves. Fermentation, he said, took place in extracts where chlorophyll was absent, as in the extracts of broom, colchicum, and poppies ; but when chlorophyll is present it never takes place. An extract from the stalks alone he found to liquefy soon. He agreed with Mr. Deane that the best extract was made from a plant of which the flowers were fully formed, and all the soft parts, leaves, flowers, seed-vessels, and branches were used. Such an extract would keep good an unlimited time. In 1831 he experimented with the juice of hemlock. He separated the albuminous matter and chlorophyll, and found that these in summer weather moulded very soon, while the juice kept well. In examining the juice to try and discover what had kept it, he found a considerable amount of chloride of sodium, which he believed was the cause.

Mr. Francis said he always used all the soft parts of the plants.

Mr. Haselden said he had made extracts according to the Pharmacopœia process, which he found to keep very well, and have the true aroma, but which had not the consistence of extracts made from the whole plant. They absorbed moisture, and were unfit for making pills.

Mr. Holland said that he used all the soft parts that could be easily broken by the hand.

Professor Bentley said that practical men, without an exception, never made extracts from the green leaves alone, but used all the parts of a plant in close contact with the leaves, which were essentially the same as leaves. The Pharmacopœia process could not be followed, because an extract made from the leaves never kept, but became mouldy in a few weeks.

In such a case as this, it is a vain thing for Physicians to attempt any interference with the method of preparing extracts. They may surely now be considered articles of commerce—part of the Materia Medica. It will lead to confusion and mischief, to have our authorised mode of preparation not followed, and another followed which is not authorised.

TROUSSEAU ON GRAVES.

The first volume of a French Translation of the late Dr. Graves' celebrated work on Clinical Medicine has just issued from the press, prefaced by an Introduction from the pen of Professor Trousseau. The terms in which this distinguished Physician speaks of the labours of our deceased fellow-countryman, and, we may add, *collaborateur*, for it was in the pages of the *Medical Gazette* that the Lectures in question were first given to the Profession at large, are so gratifying, and Trousseau's review of the work, and his sketch of the Author's literary and professional character are so comprehensive, just, and useful, that we make no apology for translating in our pages his introductory letter *in extenso*.

" Sir and Honoured Confrère,

" For many years I have spoken of Graves in my Clinical Lectures ; I recommend the perusal of his work ; I entreat those of my pupils who understand English to consider it as their breviary; I say and repeat that, of all the practical works published in our time, I am acquainted with none more useful, more intellectual ; and I have always regretted that the Clinical Lectures of the great Dublin Practitioner had not been translated into our language.

" As Clinical Professor in the Faculty of Medicine of Paris, I have incessantly read and re-read the work of Graves ; I have become inspired with it in my teaching ; I have endeavoured to imitate it in the book I have myself published on the Clinique of the Hôtel-Dieu ; and even now, although I know almost by heart all that the Dublin Professor has written, I cannot refrain from reperusing a book which never leaves my study.

" Graves is an erudite Physician : while so rich in himself, he borrows perpetually from the works of his contemporaries, and at every page brings under tribute the labours of German and French Physicians. Although a Clinical Observer, he loves the accessory sciences ; we see him frequently having recourse to Physiology, in the domain of which he loves to wander ; to Chemistry, with which he is acquainted, which he estimates at its true value, and to which he accords a legitimate place. He often reminds me of the greatest Clinical teacher of our day, Pierre Bretonneau, an able physiologist, a distinguished chemist, a learned botanist, an eminent naturalist, who incessantly, in the lectures and conversation at the Hospital of Tours, found in all those accessory sciences, with which he was so conversant, those useful ideas and ingenious views, which he subsequently applied with unusual felicity to the study of our art.

" Shall I now say what are, in Dr. Graves' work, the most remarkable and most important lectures ? To be just I ought to indicate all in succession : there is not one of them, in fact, which does not abound in practical deductions ; there is not one which does not bear the impress of that admirable and powerful faculty of observation which distinguishes among all, the Physician of the Meath Hospital. The lectures on scarlatina, paralysis, pulmonary affections, cough, headache, have acquired an European reputation, and the interest with which they inspire every attentive reader is assuredly their best panegyric.

" There are, however, two points to which it is important to call particular attention.

" Graves has devoted a great many lectures to typhus fever, which so cruelly decimates unhappy Ireland. It might be supposed, at first sight, that the study of the portion of his work is not of much importance to us French Physicians who fortunately have not to contend with the formidable malady in question ; this is a mistake. All the precepts of the author upon the treatment of this pyrexia are so applicable to the severe forms of our typhoid fever, that we shall with the greatest advantage consult this remarkable work ; moreover, the maxims relating to regimen have become the guide of the practitioners of all countries : it is they which now direct us in the treatment of putrid fever. And nevertheless, when he inculcated the necessity of giving nourishment in long continued pyrexias, the Dublin Physician single-handed assailed an opinion which appeared to be justified by the practice of all ages ; for low diet was then regarded as an indispensable condition in the treatment of fevers. Had he rendered no other service than that of completely reversing Medical practice upon this point, Graves would, by that act alone, have acquired an indefeasible claim to our gratitude.

" On the other hand, I cannot sufficiently recommend the perusal of the lectures which treat of paralysis ; they contain a complete doctrine, and this doctrine has decisively triumphed. The sympathetic paralyses of Whytt and Prochaska have now their place assigned in science, under the much more physiological name of reflex paralyses, and the Dublin Professor is the first who has studied with exactness their etiological conditions, as he is the first who has made known their pathogenic process. Anticipating by many years the admirable works of Marshall Hall, he has comprehended, he has seen that anomolous peripheric impressions may react upon any section of the medulla, and determine at a distance disturbances of movement or of sensibility; he has, in a word, created the class of peripheric or reflex paralyses, and he has clearly established the relations existing between these paralyses and acute diseases. Unhappily these remarkable lectures have remained a sealed letter for the majority of French Medical men ; but it is time to render to the Physician of the Meath Hospital the justice which is due to him ; it ought to be known that Graves is the creator of this new doctrine which has profoundly modified, within a few years, the pathology of the nervous system ; it is right, in fine, to refer to its true author the suggestive theory of the paralyses and the convulsions of peripheric origin.

" You have, then, Sir, done a very useful work in publishing Graves' Lectures. You rendered a great service, if not to beginners, who will perhaps not find in them the elementary ideas which are necessary to them, at least to Physicians, who must understand the reasons of instinct and intelligence by which they ought to allow themselves to be guided in the difficult paths of practice, who are called upon to assist in the doubts, embarrassments, and perplexities which trouble the conscientious man when he is engaged in those obscure cases which so frequently present themselves in the wards of an Hospital.

" Graves is often empirical. What true clinical observer can avoid being so ? But he is so only in spite of himself. He seeks, he points out the reasons which determine him ; he discusses them, and he conducts his pupils step by step from the theory, occasionally too ingenious, to the application, which is always useful, though often unexplained.

" Graves is a therapeutist full of resources. For the majority of French Physicians his medications present something unusual, because the agents he employs are rather less used in France ; but we learn in his lectures the medicine of our neighbours at the other side of the Channel—medicine strange to us, as ours is to them. We learn in them the methods most relied upon in the United Kingdom, and the remedies to which our English colleagues give the preference.

" I freely confess that I had some difficulty in accepting, notwithstanding the imposing authority of Graves, what he states of the influence of certain means, such as mercurials, essence of turpentine, spirituous preparations, nitrate of silver, etc., etc. ; but the Dublin Practitioner speaks with so much conviction, that I ventured to follow his precepts, and I must say that my first trials very soon encouraged me to adopt unreservedly what at first I accepted only with mistrust. There is not a day that I do not in my practice employ some of the modes of treatment which Graves excels in describing with the minuteness of the true Practitioner, and not a day that I do not, from the bottom of my heart, thank the Dublin Practitioner for the information he has given me.

" Graves is, in my acceptation of the term, a perfect clinical teacher. An attentive observer, a profound philosopher, an ingenious artist, an able therapeutist, he commends to our admiration the art whose domain he enlarges, and the practice which he renders more useful and more fertile.

"We shall, therefore, all be much indebted to you, my dear confrère, for having rendered familiar to us an author unfortunately too little known among us, and whom his unjust fellow-countrymen will perhaps soon forget.

"A. Trousseau."

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON RABIES CANINA.

By M. BOUDIN.

The following are the conclusions of a Memoir sent in to the Academy of Medicine by M. Boudin, on the occasion of his candidature for the vacant membership in the section of Public Hygiene:—

1. We may estimate the number of dogs in Europe at more than twelve millions, and the cost of their keep at a million francs per diem, or half a milliard per annum. The anuual number of victims amounts to several hundreds. 2. In the immense majority of cases rabies is propagated by the bite of the mad animal, although sometimes it appears to have been transmitted by licking the skin, when more or less excoriated. 3. The perusal of the innumerable documents which have been published on the subject does not reveal a single fact capable of furnishing serious scientific proof of the occurrence of spontaneous rabies canina. 4. Even if this spontaneous occurrence ever did take place, it would do so with such rarity, that it would scarcely be necessary to take it into consideration in framing measures of sanitary police. 5. The old hypothesis, recently revived, which attributes rabies to unsatisfied genetic instinct, does not bear the slightest examination. 6. The influence attributed to the temperature and humidity of the air on the frequency of rabies is contradicted by facts. 7. The pretended rabic epizootics described by authors are only multiple instances of communicated rabies; and the term epizootic, in this case, should be excluded from the language of science. 8. We are in the possession of no positive data as to the extreme limits of the period of incubation of rabies in man. In the dog it would seem to last seven months (Youatt), and in the horse fourteen months and a-half. 9. No true pathognomic sign of rabies exists in the dog, hydrophobia, properly so called, seeming to be here quite at fault. The peculiar howling bark is of great value in the diagnosis. 10. Science is in possession of nothing certain regarding the alimentary nocuity or innocuity of the flesh of mad animals, or of the milk of cows and goats bitten by mad animals. 11. With respect to the measures of public hygiene and administrative police:—(a) The tax on dogs has had the effect of diminishing their number, and so far the chances of the occurrence of rabies and hydrophobia. (b) As rabies may manifest itself throughout the year, the surveillance of dogs should never be suspended and they should always be kept muzzled. (c) As bites have been often inflicted by muzzled dogs (20 times in 156) the proper application of the muzzle should be strictly seen to by the police. (d) Dogs which have been bitten by dogs that are either mad or suspected of being so, when not immediately killed, should be sequestered for a period, at least, equal to the known maximum of duration of the period of incubation.—*Union Médicale*, No. 136. [M. Fauvel, the French Sanitary Officer at Constantinople, stated at one of the French Medical Societies (*Gaz. Hebdom.*, No. 45) that hydrophobia, although a very rare disease in the East, is yet occasionally met with in Constantinople, some seven or eight cases having occurred there of late years. According to the popular opinion there, rabies only occurs among the domesticated dogs, while the wandering dogs, which are numbered by thousands in that city, never become the subjects of the disease.]

EXCERPTA MINORA.

Spontaneous Development of the Plague. — M. Fauvel, Medical Sanitary Officer at Constantinople, relates that, since 1844, nowhere had plague shown itself throughout the world, when, in 1858, in a small locality between Tunis and Egypt, it became developed amidst a tribe living under tents, and having no communication with any contaminated country. It has been ascertained that this tribe, decimated by famine, had been reduced to eat the remains of the dead. Typhoid disease first exhibited itself, which, by the fourth year, had taken on the character of the plague.—*Gazette Hebdomadaire*, No. 45.

Atresia Duodeni.—Dr. Wallmann exhibited to the Vienna Medical Society a specimen of this rare occurrence. It was observed in an infant five days old, who died with symptoms of peritonitis. The stomach was greatly distended, the pylorus being constricted; and behind the pylorus the upper and descending portions of the duodenum were distended to as great a size as the stomach. At the point of entrance of the ductus choledochus, the calibre of the duodeuum was entirely closed, save a mere punctiform opening, by means of a duplicature of the mucous membrane. The rest of the intestinal canal was normal. The stomach and distended duodenum were filled with a thin fluid.—*Wien Wochenblatt*, No. 20.

Administration of Medicine by Drops.—In relation to a new "drop counter" laid before the Academy of Medicine, M. Reveil related the results of numerous experiments he had tried as to the comparative weight of the drops of various fluids. The result is that there is no proportion between the weight of the drops of a liquid and its density. For example, to obtain a weight of 1 gramme (15 grains) the following liquids require these different numbers of drops:—Distilled water, 20; sulphuric acid, at a density of 1·843, 32; chloroform, at a density of 1·480, 58; tincture of digitalis, 59; Sydenham's laudanum (vinum opii), 37; solution of sugar, 40 per cent., 20; essence of turpentine, 55; and croton oil, 49. The natural inference is, that all liquid medicines should be prescribed by weight.—*Bull. de l'Acad.*, October, p. 78.

On Shortening after Fractures of the Thigh.—M. Velpeau, while exhibiting a patient to his class in whom this was somewhat markedly observable, pointed out the fact that, nevertheless, there was no lameness; and the absence of this in so many cases of shortening after fracture of the femur, he observed, led him to look with little favour upon the numerous apparatus for producing extension and counter-extension in fracture of the thigh, with a view of preventing shortening. In fracture of the leg, where such apparatus is never resorted to, considerable shortening is unattended with lameness. The compensatory curvature of the spinal column, and the inclination of the pelvis towards the short limb, gradually meet the inconvenience. The most simple form of apparatus, and the attentive surveillance of the Surgeon, will keep the shortening within moderate limits, and then this will not be found to be accompanied by lameness.—*Gaz. des Hôp.*, No. 101.

Action of Opium on the Genito-Urinary Organs.—Dr. Woodward states that accident led him to observe in his own person the incorrectness of the assertion so generally made, that opium arrests the urinary secretion. On the contrary, he found by repeated experiments, that his urine, while taking small doses of sulphate of morphia, doubled in quantity and decreased in specific gravity, from 1014 to 1003. Five young men were also experimented upon, and in four a large increase in quantity and a lower specific gravity were observed. In the other the quantity remained the same, but the specific gravity was markedly lessened. He did not obtain the same results when he used opium itself, but they followed whether he employed the muriate or sulphate of morphia. Acting upon this hint, he has several times used morphia in irritable conditions of the nervous system, where a diuretic was required, and with good effect. "I think it will be found that, in many cases of disease, the urinary secretion is arrested by the state of nervous tension which has been superinduced, and that, instead of a resort to stimulant diuretics, sedatives will relax the tension, and allow the secretion to be restored." Another marked action of opium, Dr. Woodward observes, is as an anaphrodisiac. He has found that among opium eaters, both male and female, the sexual desire becomes almost extinct; while he has prescribed it with good effect in persons suffering from lustful propensities. —*Boston Medical Journal*, vol. lxv. p. 158.

FOREIGN CORRESPONDENCE.

FRANCE.

PARIS, October 28.

THE SUCKING APPARATUS OF INFANTS.

SOME time ago, Messrs. Charles Robin and Magitot brought the results of their researches on the mucous membrane of the gums in the fœtus and newly-born infants, before the Société de Biologie; and the following are a few of the most important particulars regarding the sucking apparatus of infants:—On the dental cartilage of both jaws there exists, in the region of the canine teeth, a membranous protuberance, which is most conspicuous in the lower jaw, and sometimes entirely wanting in the upper. This prominence, which disappears three or four months after birth, shows the following peculiarities:—It has a slight impression in the centre, and on microscopic examination, two or three papillar prominences may be distinguished, which are very vascular, and thereby capable of erection. The protuberance on the right side of the lower jaw is generally connected with that on the left, by a membranous seam, which is also furnished with papillæ, and very vascular. The edge of the lower jaw, therefore, possesses, as it were, a thin and small lip, extending from one canine tooth to the other, and evidently serving the purpose of sucking.

In some individuals this membranous fold is very thick, but it is always moveable forwards as well as backwards. In such instances the prominences are replaced by the ends of the fold itself being larger; so that it resembles a soft and almost œdematous tubercle of oval form. Similar tubercles, only less broad and prominent, exist on the upper jaw. If the surface of the membranous fold is closely examined, it appears to be slightly wrinkled: which is due to the rather voluminous papillæ with which it is furnished; these are rounded above, and covered by a delicate layer of epithelium cells, like the rest of the gums; through which the top of the papillæ are distinctly visible. The reddish colour of this membrane may be easily distinguished from the whitish appearance of the fibrous tissue in the mucous membrane of the gums, which is covered by it; and where it passed into the gums, wrinkles are no longer visible. The prominences described above are sometimes wanting, but the membrane itself is always present; and ends either at the canine teeth, or a little beyond them.

FOREIGN BODY IN THE COLON TRANSVERSUM.

A very curious case of this affection occurred a short time ago in the bagno of Brest. A dangerous convict, who had already once escaped from prison, suddenly complained of abdominal pain, constipation, sickness, fever, etc. No hernia could be found, but the symptoms, which soon increased in severity, left no doubt of the existence of an internal incarceration of the bowel. The vomiting became obstinate, the pain very intense, and the meteorism considerable. As the patient, in spite of treatment, continued to grow worse, he confided at last to his Medical attendant, that he had placed a little leathern bag with money, in the rectum, in order to hide it from the gaoler. An examination of the rectum was then made, but nothing was found in it. The symptoms continually increased, and after a time a tumour became visible at the left side of the abdomen, corresponding to the site of the colon descendens. The convict, at this stage of the disease, said that he had introduced an *étui* of wood into the rectum, and having been surprised, he had, in the hurry, placed it with the top upwards, instead of with the bottom. Seven days after the commencement of his illness, the patient died, and a post-mortem examination was then made which gave the following results:—There were the remains of acute peritonitis, viz., serous exudation in the abdominal cavity, and formation of false membranes. The cæcum and colon ascendens were immensely distended by gas, and in the colon transversum a voluminous foreign body was found, which proved to be a cylindrico-conical box, the conical end of which looked towards the cæcum. The box consisted of two pieces of sheet-iron, was about 6 inches long and 5 inches broad, weighed nearly 22 ounces, and was covered by a piece of skin, no doubt for protecting the mucous membrane of the rectum from the contact with the metal, and for facilitating the expulsion of the box. It contained the following apparatus:—1. A piece of a gun-barrel, four inches long. 2. A screw of steel. 3. A mother-screw also of steel. 4. A screw-driver, from which four instruments a pulley may be formed strong enough for removing iron-railings. 5. A saw of steel for cutting wood four inches long. 6. Another saw for cutting metal. 7. A boring syringe. 8. A prismatic file. 9. One two-franc piece and four one franc-pieces tied together with thread. 10. A piece of tallow for oiling the instruments.

After this extraordinary discovery had been made, an inquiry was instituted into the habits of the galley-slaves, and the chief gaoler said, that convicts of the worst description used to conceal suspicious objects, as instruments, money, etc., in the rectum; these things, however, were generally of small size, being scarcely ever larger than an inch or so, and they were called "necessaries" by the convicts. The gaoler had never seen one similar to the box just described. These *étuis* have almost always the same shape, one extremity being conical and the other blunt. They are always introduced in such manner that the conical end looks towards the anus, whereby the expulsion of it is facilitated. In the present instance the convict had been obliged to conceal his *nécessaire* in a hurry on the approach of a person, and confounded the ends of the *étui*, and thus it happened that the box made its way through the rectum, the S. Romanum, and the colon descendens, into the colon transversum, where it was discovered.

AMAUROSIS AFTER PNEUMONIA.

Paralytic conditions of several organs after acute diseases, as typhoid fever, diphtheria, etc., are of frequent occurrence: but amaurosis after pneumonia seems to be a very rare affection. A case of this kind recently occurred here in a patient who was on the point of leaving the Hospital, being convalescent from pneumonia, when he suddenly became blind in both eyes. There was no vertigo, no head-ache, no noises in the ear, no symptoms of congestion towards the head. Nevertheless, ten leeches were immediately applied behind the ear, and a "thumping" dose of calomel was given Six hours after the application of the leeches, which had drawn a considerable quantity of blood, the patient again began to see, and after two days, vision was completely re-established. It is to be regretted that no ophthalmoscopic examination was made in this case, as it would thereby probably have become evident whether the blindness was due to a paralytic affection of the retina, or a congestion of the choroidea. The latter supposition appears probable from the excellent effects produced by the application of leeches. M. Sichel, our celebrated oculist, has seen a number of similar cases. One of his patients, who was under his care before the ophthalmoscope had been invented, had become blind after pneumonia, and remained so for two months. M. Sichel believed that, in consequence of the impeded respiration, a complete and regular reflux of blood through the vena cava superior had been prevented, and thus a venous congestion been caused within the cranium, whereby a portion of the brain and the optic nerves had been compressed. An antiphlogistic treatment proved curative in this case. Since then M. Sichel has seen several cases of this kind, not only after pneumonia, but also after chronic or subacute catarrh of the lungs, and also after great exertion of them, as, for instance, in musicians after forcibly playing on wind instruments. In all such cases there was only a passive cerebral congestion, and the ophthalmoscopic phenomena were the following:—The retina was slightly congested, the papillæ appeared of a pink colour, their outlines were indistinct and injected, the choroidea was scarcely hyperæmic. The circumstance that amaurosis does not occur in the acme of pneumonia, but rather during convalescence, is explained by M. Sichel in the following manner:—In the height of the disease the antiphlogistic treatment and the perfect tranquillity of the patient prevent a sudden cerebral congestion, but during convalescence, when the cure is not yet quite complete, the patient is no longer so careful as before. A prolonged conversation, a scream, a sudden excitement, etc., are quite sufficient for producing a disturbance of circulation, which, even if of small extent, may yet be strong enough for compressing the origin of the optic nerves, and thus causing blindness.

TUBERCULOSIS AND UTERINE DISEASE.

The following case is of interest as showing the connexion which may exist between certain diseases. A woman, aged 27, began to suffer from dysmenorrhœa after her fourth confinement. The courses were tardy and painful, and she also suffered from leucorrhœa, disturbed digestion, oppression in the stomach, flatulence, emaciation, loss of power, vertigo, palpitations of the heart, etc. At last symptoms of phthisis ensued,—viz., a distressing cough, hæmoptysis, sweat in the night, diarrhœa, and fever in the evening. There was a dull percussion sound below the right clavicle, and the respiratory murmur was indistinctly heard. On examining the womb the collum uteri appeared swollen, the two labia of the os were quite ulcerated, and suppurated freely, while mucus flowed away from the cavity of the organ. The cervix uteri was then cauterised twice a-week, whereby a cure of the abnormal secretion and ulceration was brought about. At the same time the digestion improved, the patient gained strength and flesh, the fever disappeared, the percussion sound lost its dulness, and the pain below the clavicle was also gone, so that the patient could be discharged from the Hospital as well as could be expected.

GERMANY.

Giessen, October 25.

THE SEA-BATHS OF NORMANDY.

Professor Phœbus, of this University, has recently visited a number of the sea baths of Normandy, and a few of his observations on them may be of interest to your readers. The Channel has an advantage for bathing, which is a drawback to the sailor, viz., much motion and short waves. Chochet, therefore, calls it the most dangerous and most frequented sea of the universe. While on the Baltic and the German Ocean bathing is only seldom impossible, this is much more frequently the case in the Channel, where the wind is often so high that only the most expert swimmers can venture into the sea. But, as a rule, the sea-bath in the Channel is the most pleasant, and much more invigorating than elsewhere; and it is a common saying, that the higher the wind, the better the bath. The wind is especially high in Tréport, Dieppe, St. Valery-en-Eaux, Fécamp, and Etretat, but not so much so in Sainte Adresse, Havre, Honfleur, and Trouville. Havre, however, has one advantage over the other places just mentioned, viz., that owing to the peculiar formation of the beach, the high tide lasts much longer, viz., three hours, while in other places it is generally over in a quarter of an hour. Delicate persons who cannot stand the impetus of the waves, had better go to Honfleur. In all the above-mentioned places the air is much better and more bracing than on the Baltic and the German Ocean.

In former times, malaria was very prevalent on the coasts of Normandy, but such considerable sanitary improvements have been made of late, that we hear very little of ague now. The alluvial soil is very dry, and inundations are by no means frequent. In Havre itself there are only a few parts of the town, viz., Graville and L'Eure, which are still unhealthy; but this is owing to stagnant water and over-crowded dwellings, and, of course, bathers would not live in these quarters.

In no one of the afore-mentioned places is the beach as purely sandy as it is in Ostend; but it is more or less stony everywhere, and those who have tender feet are therefore obliged to use sandals. In this respect the beach at Trouville is best, and worst at Etretat, where it is entirely pebbly. In these bath-resorts a moderately-warm foot-bath in a tub is generally handed to the bather by the attendant immediately on his leaving the sea, and he is thus prevented catching cold while dressing. These places have, however, one drawback, viz., that there are only male attendants, and they are therefore scarcely fit for delicate women. Expert swimmers are generally kept on duty on the beach to save such as are in danger of drowning. Lady-swimmers are also often met with, and in 1859 a lady rescued two men who were on the point of sinking. Warm sea-baths may be had everywhere.

Some time ago, an enterprising Apothecary at Fécamp endeavoured to manufacture a mineral water from the sea water for drinking. He had the water filled at some distance from the beach, where it is pure; it was then filtered and impregnated with carbonic acid, in order to render it more palatable; but his invention was not patronised by the visitors, and he has therefore abandoned the undertaking.

THE INFLUENCE OF WATER ON THE METAMORPHOSIS OF MATTER.

Dr. Frederic Mosler, of this University, has recently instituted a series of experiments on the influence of common drinking-water, taken in various quantities, upon the general metamorphosis of matter in the human body, which have led to important results. The experiments were made on a number of men, women, and children; in one series the food and the general mode of living remained unchanged; in another, the liquids which had been usually taken, were withdrawn; and in a third, various quantities of common drinking-water were added to the usual consumption of liquids. The water used in these experiments had been carefully analysed, and was found to contain 2·7 grains of solid constituents, amongst which the carbonate of lime, iron, and magnesia, and chloride of sodium predominated. One grain of carbonic acid was contained in sixteen ounces of water.

The disturbances observed after withdrawing liquid food were very striking, and ensued more rapidly, if the solid food which was taken, contained only a trifling quantity of water; in persons in whom the metamorphosis was comparatively more energetical than in others; if exercise was taken, and if in consequence of previous indisposition, there was no great power of resistance to morbid influences. In every case the secretions and excretions were diminished, especially so, the excretion of urine, which, although its specific gravity was considerably increased, nevertheless was found to contain a much smaller amount of solid constituents than the quantity of urine which had been previously discharged. The urea was very much diminished; after that came the chloride of sodium, phosphoric and sulphuric acid. Effete matter was therefore retained in the blood, in consequence of a diminished action of the kidneys; and to this the morbid symptoms, and especially the fever which was observed, were no doubt to be ascribed. The excretion by the skin and the lungs was also much diminished; costiveness, loss of appetite, and a dry tongue were complained of—that is, evidently symptoms owing to a deficiency in the secretion of the mucous membrane of the mouth, the stomach, and the intestines.

If, on the other hand, a larger quantity than usual of water was administered, the metamorphosis was greatly accelerated. The quantity of the urine, of urea, the sulphates, phosphates and chlorides, and of the fæces, was much augmented, while uric acid appeared diminished. As regards age, sex, and constitution, the same quantity of water had a much more considerable and lasting effect in boys and girls than in adult males; if water was administered for a somewhat lengthened period to males of a feeble constitution, the metamorphosis was in them more increased than in very vigorous persons; and febrile symptoms set in which were, in a few instances, of a threatening character. The temperature of the atmosphere and of the water which was taken, had also a certain influence. If the air was warm, and at the same time exercise was taken, the metamorphosis increased more considerably; warm water appeared more effective than cold, and there were also differences according to whether the several quantities of water were drunk at long intervals or in rapid succession.

In cases where the increased appetite was indulged by a more abundant administration of food, the expense of the system was thereby compensated, and the long-continued use of water thus made not such inroads upon the constitution than was the case if the food was not increased; the weight of the body was also not so much diminished under such circumstances. In some cases the action of the water was chiefly diuretic, in others it was more diaphoretic. As regards the intestines, generally, only a very trifling quantity of water was eliminated by them; but in one boy and two girls a large amount of water taken caused profuse diarrhœa, which was also observed in a few adult males, after the use of the water had been long continued.

THE TREATMENT OF CHILD-BED FEVER.

In an epidemic of child-bed fever, which occurred some time ago in the obstetrical clinique of Professor Von Ritgen, the following plan of treatment was adopted, with exceedingly beneficial results, as even cases of the utmost severity were

cured under its influence. At first $\frac{1}{8}$th of a grain of morphia was given, and this dose repeated two, three, or even four times a-day, according to the violence of the abdominal pain. An hour after the dose of morphia, a mixture of camphor was administered (℞ Camphor ℈ss., gummi mimos ʒj., Aq. chamomill ʒiij., liq. ammon. acet., sacch. albi, āā, ʒj.); an hour after this the patients took one grain of quinine; then another dose of morphia, and so on, until the symptoms decreased, which was the case with all patients hitherto treated in this manner. In one, two, or five days, profuse perspiration came on, and the secretion of the urine, the lochia and the milk was considerably increased; together with this a great improvement took place in the general condition of the patients. If the stomach was so irritable that it did not keep the medicines, nitrate of silver was first given, in order to diminish the gastric irritability; this had the best effect, as after it the medicines were well borne.

With regard to prophylaxis, I may mention that quinine, even in large doses (of twenty to thirty grains per diem before delivery), did not prevent the occurrence of the fever, nor did it diminish the intensity of it when present. On the other hand, fumigations with aqua regia, which have been recommended by Mr. Wilson, proved to be of the greatest use, as after them no other case of the endemic occurred.

MADEIRA.

Funchal, November 1.

THE SEASON.

It almost seems as if the misgivings entertained by some Physicians, that this place would soon become a crowded and fashionable health-resort, were fast being fulfilled. In no previous year have the boarding-houses been so full during October, nor has the number of "quintas to let" been so small as it is at present This is especially due to an increased influx of patients from Germany, of which more have arrived this autumn than during the whole of last year. Besides this, not only the majority of German patients who came here last year, but also some English families, the number of which is likewise increasing annually, have remained here during the whole of the summer, and were thus enabled to appropriate the best quintas at an early period. The hôteliers at this place have, of course, made the most of the opportunity thus afforded them, and with a unanimity seldom found amongst this class, they have considerably increased the price of board and lodging in their establishments. Three rooms for two persons, which two years ago could be had for 100 dollars a-month, were 120 last year, and are 150 dollars now. As the visitors are obliged to take the rooms for at least six months, and to submit to many other troublesome and annoying conditions, it is obvious that an enlargement of the accommodation here, and a more lively competition amongst the hôteliers would be of great benefit to the stranger. The example set by "mine host" has only too readily been imitated by all those natives who live upon foreign visitors, especially by such as let horses on hire. A decent horse is now only let for the month or even the whole season, and instead of 24 to 26 dollars, 30 is now the lowest sum at which an individual of the equine species is offered for use. The price of provisions has until now remained very low, 2½d. being paid for a pound of beef; so that it is cheapest to hire a quinta, and have your own household. In this way a person of not too extravagant propensities may live for 18 to 20 dollars a-month, board, lodging, attendance, light, etc., included; while living in an hotel or a furnished lodging, even in the most modest style, costs 40 to 45 dollars a-month per head. If the rooms are a little better than the average, 50 to 75 dollars is asked for them. The difficulty of finding a good lodging is now so great, that yesterday a batch of Germans crossed over to Teneriffa to see whether the climate there would not do as well as that of Madeira for the season.

The dearth of comfortable dwellings is one reason why patients should not undertake a journey to Madeira too late in the year, as those who come last get not only the worst accommodation, but have also to pay the highest price for it. The best time for coming is the second half of September, when not only is the sea very calm, but the great summer heat in the island is also on the decline. This latter generally disappears towards the end of September, when the weather is broken up by some violent showers. October is the most pleasant and the most efficacious month for patients suffering from diseases of the chest. It is almost always quite serene throughout; and only during the last two days we have had, with a strong south-westerly wind, which even rendered the disembarkation of passengers difficult, a few considerable showers, quite similar to those at the end of September. During the whole of October the thermometer ranged from 70° to 72° F. Only at noon, when the sky was quite cloudless, exercise in the open air was not advisable; although the cautious Portuguese only venture out under the protection of a thick white umbrella, whatever the time of day.

The patients generally take their walks in the morning and afternoon, along the New Road (Caminho Nuovo), the only even promenade near Funchal, which extends for two or three miles along the sea, in a westerly direction from this place. I am unable to give any more information to-day, as I find the steamer leaves sooner than was expected; and I must therefore postpone further communications, which I hope may be useful to your readers, to my next letter.

GENERAL CORRESPONDENCE.

COLNEY HATCH.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is some satisfaction to those in whom the weary experience of successful injustice and unappreciated merit has engendered the spirit of a cynical scepticism, and deadened the lustre of life, to hear the voice of justice now and then speaking.

That your temperate observations with regard to the office of Medical Superintendent at the Colney Hatch Asylum, will penetrate the ears of those who, like deaf adders, have so long refused to hearken to wisdom, is exceeding doubtful. Where words of counsel, as in this case, are necessarily words of reproof, it often happens that the ignorant folly which has produced, becomes the obstinate stupidity which continues, the evil.

If there be any one who, wishful for a new experience, proposes to himself to realise the idea of the vast and uncontrollable, and to obtain a feeling of utter, hopeless, helpless confusion, I should recommend him to visit the Colney Hatch Asylum. The Commissioners in Lunacy have protested against the increase of its unmanageable magnitude; but, notwithstanding protests, notwithstanding common sense, those who have the power have gone on adding stone after stone to this veritable Babel of folly. The intelligent foreigner who, filled with great expectations concerning the humane and enlightened system of treating insanity in England, visits the Colney Hatch Asylum, leaves it with his favourable impressions rudely disturbed, and, raising his hands, or shrugging up his shoulders, wonders that such a mass of brickwork is tolerated. Those who, in England, have had experience in the management of public institutions, believe it, at the best, to be a fearful mistake; and some who would have been candidates for the recently vacant office of Superintendent, had it been vacant anywhere but in Middlesex, refused to become such, notwithstanding the tempting proximity to London, first, because the vacancy was in Middlesex, and, secondly, because it was at Colney Hatch.

Within a very short period two inquests have added to its unhappy notoriety—both on patients who had been killed in the place to which they had been sent for the purpose of being kindly cared for and securely guarded. It is not in human nature not to suspect that two such open disasters testify to a great deal of mischief which does not so palpably declare itself. When attendants are accused of beating a patient to death, we reflect that *nemo repentè fuit turpissimus*, and fear that patients are sometimes beaten not to death. When one patient strangles another because the attendants are not, as according to the Superintendent's directions they should be, distributed properly through the wards, one is apt to suppose that some irregularity short of strangulation may occur, and not demand an inquest. When, in short, as must inevitably be the case in so large a place, pauper lunatics, unable to take care of themselves, but yet able to be very troublesome, are left greatly to the mercy of poorly-

educated attendants—men, indeed, who have often taken that position because they have failed in every other—it is scarcely an unreasonable dread which shudders at the cruel possibilities.

One would fain hope that, if the magistrates of Middlesex were seriously to reflect upon these things, they would cease so pertinaciously to disregard the recommendations of those who, like the Commissioners in Lunacy, by their long and varied experience, are so well able to judge of the best method for successfully managing an Asylum, and who, at any rate, in all their recommendations, have but one object, and that, the good of those unfortunate creatures now, by a fearful affliction, rendered so helpless and so much dependent on the help of man. The time will surely come when every individual who now, perhaps, sheltered under the irresponsibility of a Committee, and influenced by the tone thereof, acts not always according to the kindly impulses of his heart, will feel in a powerful manner his individual responsibility, and it will then be a much more comforting reflection, and will seem to have been a much more noble, honourable, Christian act, to have saved one human being, though only a pauper lunatic, one pang of unnecessary suffering, than to have saved many pounds to a wealthy county.

In these observations I would most carefully disclaim the design of attributing any blame to the officers of the Asylum. It is the system that is accursed—a system very cruel, indeed, to those who have to carry it out. Few things have more painfully impressed those who like myself occupy the position of Superintendent, than the fact that one who has confessedly been a most excellent Superintendent, and who has always been heartily interested in the insane, should have felt it necessary to resign a position at Colney Hatch, in which his labours have done so much to prevent the confusion of a bad system degenerating into downright chaos.

I am, &c.

M. D. Lond.

TURKISH BATHS.

Letter from Dr. Haughton.

[To the Editor of the Medical Times and Gazette.]

Sir,—I observe in your impressions of the 16th and 23rd inst. respectively, two communications from Mr. Bolton, of the Newcastle Infirmary, on the construction and remedial effects of the Turkish Bath, which seem to me to suggest some important considerations. The mode of heating recommended is open to two objections, which might be overlooked by the superficial observer. The first is, that when hot air is admitted through tubes into a room, it does not become thoroughly intermixed with the air, but the heat in one place is very much greater than in another. Secondly, it has been artificially *dried*, and is, therefore, not in the most suitable condition for respiration, neither does it appear that it is desirable to inhale air at a temperature of 212° Faht. in one corner, while the general temperature only amounts to 110° in one room, and 150° in the other. I have examined two Turkish Baths constructed on the principle recommended by Mr. Bolton; but the cost of fuel in them, instead of being only eight pence per day, is much nearer eighty pence. In one, the furnace door was red-hot when I visited it; a state of things showing a pretty rapid combustion of fuel, and the "pure, fresh air" was, in both cases, obtained from the dusty precincts of the stoke-hole; whereas, in this and other establishments on the Roman principle, air is admitted near the floor, direct from the adjoining thoroughfare. With regard to the effects of the bath, I am happy to be able to reiterate, without fear of contradiction, all the statements which I published last January, and in most respects they agree substantially with those of Mr. Bolton. I confess, however, that I have not seen any benefit either in "hernia" or "varicose conditions." But in gout and rheumatism the effects have been remarkably good; and in lumbago there is no remedy to be compared to it. It is no exaggeration to say that persons have come to these baths, walking with difficulty, in a stooping position, who have gone out of the building as straight as possible. So far as I know, there are no writings anterior to my own in which attention was drawn to the error of using very high temperatures; and I observe with pleasure that they are everywhere being discontinued.

One thing more is required before the bath can be brought within the reach of the public, viz., the costly, tedious, and effeminate custom of shampooing must be totally got rid of, except when prescribed as a therapeutic agent.

I am, &c.

Edward Haughton, M.D.

Oriental Bath Company, Liverpool, November 24.

DIET OF DIABETIC PATIENTS.

Letter from Dr. Camplin.

[To the Editor of the Medical Times and Gazette.]

Sir,—The elaborate account of a Case of Diabetes treated in Guy's Hospital by Dr. Pavy, and published in the last number of the "Guy's Hospital Reports," renders necessary a few remarks from me with reference to bran biscuits and gluten bread. I shall refrain as much as possible from entering into the general treatment of this case, and confine myself to those points in which it bears upon the important question, how far these articles are useful in the treatment of diabetes. I am induced to make these remarks, inasmuch as a cursory view of Dr. Pavy's case would lead the reader to suppose that the bran and gluten had better be dispensed with, since the urine and sugar (although far below what they were during the mixed diet) increased during their use. This result, however, might have been predicted, if the large quantity administered, and the other circumstances of the case, are taken into account.

The patient's diet was suddenly changed from one consisting entirely of animal food to 17½ ounces of bran biscuits in one day; that quantity of Smith's biscuits (which I presume to have been those used) would contain a considerable amount of starch, besides which, if we reflect for a moment on the uncomfortable feelings and indigestion which must result from 17½ ounces of hard, coarse, dry biscuits, we shall not be surprised that the poor patient soon complained that they did not agree with him; for, independently of the starch, we may take it as a general rule that an aggravation of the symptoms will occur, whenever indigestion is produced, by whatever food it may have been occasioned.

The gluten bread was given to the extent of 12 and 14 ounces in a day; these would contain 3 and 3½ ounces of pure starch, and be far too much for any ordinary digestion. The diabetic symptoms were, as might have been expected from the larger proportion of starch, more aggravated than during the use of the bran biscuits, and considerably more than when taking the purely animal diet.

I have never taken, nor advised others, to substitute the bran cake or gluten for ordinary bread as to weight; on the contrary, we are all agreed that animal food is the "staff of life" to the diabetic. Since reading Dr. Pavy's paper, I have observed the quantity of bran cake, or English gluten (of which more hereafter), necessary for myself, and, without practising any kind of restriction, find it to be under three ounces per diem. I have also obtained from Mr. Blatchley the particulars of a considerable number of those whom he has regularly supplied, and the daily consumption does not exceed four and a-half ounces. Yet between these small quantities and the total absence of any substitute for bread, the difference in point of comfort is not easily estimated by the inexperienced.

The bran cakes, if prepared carefully according to my directions, need not contain more than five grains of starch to the ounce, and with vegetables, etc., make the diet agreeable, and the patient enjoys his meals, instead of turning from them with disgust; at the same time the amount of starch is so small, that we obtain the advantages of animal diet without its inconvenience.

Dr. Pavy's case is almost unique, even in Hospital practice, as to the diet to which the patient submitted during his stay, and that with which he left off could not be followed up by patients in general; and it is in a great measure owing to the difficulty of continuing a purely animal diet for a length of time, that so many practitioners have, until recently, given up the attempt at restriction (a).

Moreover, although I have shown elsewhere (b), that health

(a) See Dr. Aitken's "Practice of Medicine," article Diabetes.

(b) See "Camplin on Diabetes," page 43, et seq., where a description is given of the diet of the natives of South America.

and vigour may be maintained, under certain circumstances, on a purely animal diet, I am of opinion that in our climate and with our occupations, animal food in sufficient quantity to supply the stomach and alimentary canal would soon be injurious, by producing serious congestions, unless, indeed, it either passed off very partially digested, or the diabetic drain continued to a considerable extent.

Before concluding this paper, I wish to call the attention of the Profession to a new preparation for the diabetic, which appears to me so important that I should have made it the subject of a separate communication had not Dr. Pavy's case occasioned these remarks. I allude to the gluten powder and biscuits now prepared by Mr. Blatchley, and sold by him under the title of English Gluten.

It is not necessary that I should describe the unpleasantness of the old preparations of gluten, nor discuss the merits or demerits of the French preparations at present in use; it is sufficient to observe that they have proceeded on a principle of obtaining something analogous to fermentation. In this new preparation nothing of the kind is attempted; the gluten is made as free as possible from starch, and then brought into a state in which it may be made into cakes or biscuits.

This preparation will, I expect, be generally agreeable to patients; and I regret that it cannot be furnished so cheaply as the bran, and is therefore less fitted for Hospital use. It is, however, less expensive than the French gluten, and a small allowance will suffice. Whether the bran or gluten is used, I prefer that the powder should be purchased and made into cakes at home; but those who wish to avoid all trouble will find the gluten biscuits very pleasant.

My suggestion that Hospitals should provide themselves with a mill for grinding the bran, has not been carried out, so far as I know, except in one instance. I am still of opinion that it would be both useful and economical.

I am, &c. JOHN M. CAMPLIN.

33, Compton-terrace, Islington, Nov. 16.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, NOVEMBER 19.

DR. COPLAND, President, in the Chair.

The following specimens were exhibited and the report on them read by Mr. NUNNELEY:—

DISEASE OF THE APPENDIX VERMIFORMIS, WITH A SMALL APERTURE IN IT, AND ACUTE PERITONITIS.

Six months before this young man was taken ill he had the right arm torn off, and the limb so mutilated by machinery, that in amputating at the shoulder joint I had some difficulty in procuring skin enough to make a good flap. He made an excellent recovery and in three months was at his work again. I am doubtful, but think it probable, that he might at the same time have been crushed in the abdomen as he was carried round a shaft revolving rapidly. However, he became apparently as well as before the accident, and made no complaint until he was suddenly seized with symptoms of intense diffuse inflammation of the peritoneum and died in less than three days. On a post-mortem examination there was found a large effusion of lymph in the right hypogastric region gluing all the bowels together, and covering the whole cæcum with a thick coating of lymph. A very small escape of fæcal matter had taken place. On removing the cæcum as seen, the exterior of it is considerably thickened, and the lymphatic glands attached to it are large and dense. The appendix vermiformis is tied down, is much thickened, its cavity is nearly filled and closed by lymph, a small ulcerated aperture has formed at its base, while the communication with the bowel is closed, and the mucous membrane at this point of the cæcum is thicker and rougher than natural. No other disease could be found. He had always been a small rather delicate lad.

LARGE INFLAMED FIBRO-CYSTIC OVARIAN TUMOUR WITH INCARCERATED HERNIA.

I was sent for to operate for hernia in a woman aged 73. She had been ill three or four days with such symptoms as induced the Medical attendant to suppose they arose from strangulation of the protruded gut, which he could not reduce. The hernia was of long standing, no truss had been worn, and though not usually so large as it then was, so far as could be ascertained had never been entirely reduced; but finding that the sac was not tense nor hard, that I could return at least a portion of the gut, and that there was less pain and tenderness in the sac and its vicinity than over the abdomen generally, particularly towards the left side, and that the patient was in a most feeble condition, I declined to operate, not thinking the symptoms arose from strangulation. The next morning the woman died. On post-mortem examination there was found diffused inflammation over nearly the whole peritoneum, with a good deal of effused fluid in the cavity, and patches of lymph upon its surface, and upon the large sac now shown. This sac was much injected, and where not solid, filled with bloody fluid and grumous blood. It was connected with the left ovary. There was no strangulation in the large thickened femoral sac, nor any appearance of inflammation upon it or the contained ileum, as these parts will show. The hernia was femoral of the right side, though when first seen was so large as to make it difficult to say whether it were femoral or inguinal. The woman had been ill for eighteen months, during which time she had commonly referred her symptoms to the abdomen, in which she had not unfrequently complained of having severe pain.

RUPTURE OF THE STOMACH.

When I first saw the subject from whom this specimen was taken he was a remarkably fine, stout, handsome man. Two years afterwards he came under my professional care; he had then been ill for some months, during which, so far as I could ascertain, with the exception of great debility and rapid emaciation, there had been few symptoms of acute disease. At this time he was suffering from pain in the stomach after taking food, and vomiting, which symptoms appeared to have been occasioned by large doses of tinct. ferri mur., which had been prescribed for him, as the omission of the iron, and the administration of alkaline salines was at once followed by their disappearance. Subsequently, under the use of bitter infusions with the milder preparations of iron, he considerably improved and gained both flesh and strength. I now lost sight of him for some months as he removed to a distant part of the country, and subsequently took a tour on the Continent. On his return, which was hastened by his becoming worse, I found him reduced to almost a skeleton, and so weak as hardly to be able to walk. He could take but little food, and that little every second or third day appeared to be rejected by vomiting. The character of the complaint, which previously had puzzled all who had been consulted, was now far more prominent, yet even now one gentleman of large experience, regarded the disease as rather of greatly enlarged spleen, than as seated in the stomach; and another, as stricture of the lower bowels, though the symptoms rather pointed to stricture of the pylorus than either of these, yet the entire absence of any indications of malignant disease was thought to militate against this opinion. Without any assignable cause, shortly after his return, he was suddenly seized with an attack of acute pleurisy. As little medicine could be administered by the mouth, and the bowels were confined, two days afterwards an enema was given; when getting out of bed to the commode he was seized with intense prostration and great pain in the abdomen. He died within an hour after. On opening the chest, the lungs were found to be healthy, but there was some bloody serum effused into both pleuræ and the pericardium. In the abdomen was a large quantity of semi-fluid alimentary matter, of a dark colour, from the admixture of blood, which must have very recently escaped, as there was not the least trace of inflammatory action. In the posterior wall of the larger curvature, at the greater end of the stomach, was a hole through which a finger could easily be passed. The margin of this aperture was round, soft, and sloughy. The size of the stomach was larger than natural, several ulcerations of the mucous membrane, with some ecchymosed patches, were seen; the whole membrane was soft, in several places thin, and in some parts the walls of the stomach were not thicker than tissue paper. In one spot was found a large, distinctly puckered patch, as though resulting from a cicatrized ulcer. The pyloric orifice was small, and this end of the stomach contracted;

the mucous membrane and submucous tissue much thickened, and the villi largely developed, but without any trace of malignant disease. The small intestines were healthy, but the large were much contracted in parts where the membranes were hard and thickened; while the sacculi were greatly distended, and the membrane extremely thin. The other viscera were healthy. Four years before this last illness, while in the Crimea, this subject had suffered from a long and obstinate attack of dysentery, which may account for the condition of the larger bowel. Twelve years ago he had a long illness, attended with great debility, loss of appetite, and emaciation, which was relieved by a residence of several weeks in the Mediterranean. This in all probability was connected with the condition of the stomach, of which the puckered part is the remains.

LARGE EPITHELIAL CANCER OF UPWARDS OF TWELVE YEARS' STANDING SUCCESSFULLY REMOVED.

This specimen shows for how long a time epithelial cancer may exist without the constitution becoming involved, and how large a portion may be removed with the best results. It was taken from the back of a lady, aged 62. It apparently had originated in a mole, which, increasing in size and becoming painful upwards of twelve years ago, was incised, for the purpose of letting out the matter, under the supposition of its having suppurated. No pus escaped, but instead a fungus sprouted out of the wound, which never healed. This fungus gradually increased until the time I saw it, when it occupied a nearly circular space in the middle of the back, between the scapulæ. The constant discharge and irritation had reduced the patient's flesh and strength to a very low condition, but finding no evidence of any other organic disease I removed the part, making a wound seven inches by six inches, which, of course, had to be left to cicatrise. This it did rapidly and well, without any trouble whatever, the patient in a few weeks returning home considerably fatter, stronger, and altogether in better health than she had been for several years.

ENCEPHALOID CANCER OF THE LOWER JAW, MOST RAPIDLY DEVELOPED. — ACUTE SUPPURATION AND PYELITIS, AND COMMENCEMENT OF DISEASE IN THE LIVER.

The history of the case furnishing this specimen is in strong contrast with the slow progrsss of the last case, and exhibits a not very common combination of rapid malignant disease and acute suppurative fever. The subject was upwards of 60 years of age, and had been (and, apparently, at the time he first complained, was) a strong, healthy man, and of a healthy family, in whom no trace of malignant disease had ever shown itself. He had never had any acute illness, except two or three rather obstinate attacks of gout, which was not inherited, and only developed within the last three years. About four months before his death, he mentioned to me that there was a partial loss of sensation on the left side of the lower lip, over a space the size of a shilling, the health being other wise good. Soon there was a varying tenderness of the canine and two adjoining teeth, which was followed by an uneasiness during mastieation of the last molar of the same side. Though there was neither swelling nor tenderness behind the jaw. nor any difficulty in its motions, the symptoms could only be accounted for on the supposition of some pressure being made on the branch of the fifth pair of nerves, and to that atention was directed. As no alteration in the symptoms took place to my knowledge, the last molar tooth was extracted, and found to be perfectly sound. No improvement in the lip followed, but instead of the gum closing over the socket from whence the tooth had been drawn, it remained open, and when I examined it, ten days afterwards, I found a small fungus sprouting from the socket. This was removed twice, and astringents applied several times, by which it was kept in check, when, one night, after exposure to a cold, damp wind during the afternoon, my patient was seized with intense fever, with some pain and swelling in the left side of the pharynx. After a day or two the fever passed off, and he went about again as usual, but the swelling in the pharynx did not entirely subside, nor did he fully recover a healthy appearance. Suspecting malignant disease of the jaw, I was arranging to take the opinion of one or more of my metropolitan friends, when on the evening of the day the subject was broached, after another exposure to damp and cold, my patient was seized with the most intense fever I ever witnessed in any one. Within twelve hours he was reduced from a strong man to helplessness, and the side of the face swelled to double its natural size. All the constitutional symptoms of acute pyelitis were manifest. On the third day there was typhoid delirium, and death appeared to be only a question of a few hours. A blush of redness had a few hours before this been observed near the left heel; in the hope of inducing suppuration here strong irritants were applied, and afterwards a poultice. After lying comatose for six or eight hours sensibility gradually returned. Intense erysipeloid inflammation set in about the ankle, and spread over the leg to the thigh, where it was arrested. In the meantime the swelling of the face considerably subsided. After two or three weeks deep suppuration had spread over the whole temporal muscle under the jaw as far as the chin. Much matter and several sloughs came away from the openings which had been made externally, and from those which had formed within the mouth; while pus was freely discharged, and subsequently sloughs separated from openings made in the leg. As the softer swelling from suppuration in the face subsided, a more solid swelling was rapidly increasing on the outer and under sides of the jaw into the fauces, so as to render deglutition very difficult, and filling up a large part of the mouth. Not a particle of food of any kind was taken for several days at the outset of the symptoms, and for the space of upwards of seven weeks during which he lived after rallying from the comatose condition, with the exception of perhaps three pints of milk and gruel, nothing but wine could be taken. The patient at last sank from exhaustion, caused by the loss of not more than a few drachms of blood from the leg. On post-mortem examination the entire temporal muscle was found to be separated from the parts covering it. The left ascending and the horizontal rami of the lower jaw were so necrosed that the bone broke on the slightest touch. The masses on the outside of the jaw, in the fauces and mouth, were all connected (of which these portions are part), and consist of soft malignant tissue, which had evidently sprung out of the aperture from whence the tooth had been extracted, having there originated in the cancellous tissue of the bone. The thoracic and abdominal viscera were healthy, except the liver, which was large, hard and nutmeggy, with a patch of suspicious-looking deposit, near the lower edge of the right lobe. Though for upwards of two months not an ounce of solid food had been taken, and very little liquid, except wine, which had been taken freely, the abdominal parietes and viscera were loaded with fat.

VERY RAPIDLY AND EXTENSIVELY-DEVELOPED MALIGNANT DISEASE.

This third case of malignant disease is one of the most curious that has ever fallen under my notice, and, so far as my reading goes, one of the most rapidly and extensively-developed on record:—Mrs. B., a married woman without children, aged 52, was first seen by me in June, 1861. She had enjoyed general good health. Not more than six months before this date she perceived an enlargement in the right breast, which was not attended with much pain. On applying to a Surgeon, under the supposition of an abscess forming, leeches and cold lotions were prescribed; subsequently, poultices "to bring it forwards." The swelling rapidly increased, but no matter appeared. She was then told it was cancer, which must be removed; an operation, accordingly was performed. The wound partially, but never entirely healed. I found that the greater part of the right breast had been removed. There was a long line of contracted, puckered cicatrix adhering to the ribs, and extending in every direction from it a wide surface of bright red granulations from the cutis, with shallow, irregular ulcerations, from which there was a large discharge of offensive watery fluid, having the ordinary cancerous odour. This appearance extended over the whole surface of the breast, passed under the armpit, and up towards the shoulder, the skin of which was thickened and hard. The arm was fixed to the side, and the entire limb swelled to more than double its natural size, and quite helpless. The whole skin of it was thick, hard, and coriaceous, and studded all over with small papillæ, as though the cutaneous texture were hypertrophied. Some of these spots were larger and red, as though about to ulcerate. The skin at the bend of the elbow was excoriated, and gave out a sanious discharge. Cancerous ulceration extended under the axilla to the back, and passing backwards from this over the whole scapula was a large, irregular patch, of a claret colour,

in which the skin was thickened, and which was the precursor of ulceration. Similar patches on the anterior surface passed down the side, over the sternum, up nearly to the clavicles, and over the whole of the left breast. This breast was enlarged to more than double its natural size, was hard, dense, and unyielding to the touch. All these coloured patches were slightly elevated above the surrounding skin. There was a good deal of dull aching, with sharp shooting pains in the ulcerated surface, but not elsewhere. She said the right breast when removed presented exactly the same appearance, except not being so much discoloured, as the left one now does. There was loss of appetite, flesh, sleep, and strength. The breathing was hurried. The rapidity of the disease, they thought, was decidedly arrested by the treatment, and the swelling of the arm was to some extent lessened by the application of tepid sedative lotions. She did not appear worse than for a month past, when, on waking after a quiet night, she suddenly died on August 22, two months after my first seeing her. On a post-mortem examination I found a considerable effusion of serum into the right pleura, and a smaller into the pericardium, which, doubtless, had caused the sudden death; there was also some thickening of the costal pleura, corresponding with the cicatrix. All the thoracic, abdominal, and pelvic viscera were healthy. The drawing represents the appearance of the parts three weeks before death. The three portions of tissue are taken from the affected parts—one from the ulcerated cicatrix passing up towards the axilla, one from the situation of one of the discoloured patches at the margin of the left breast, and one from the substance of this. It consists of a good deal of fibrous matter with fat, and some epithelial cells. The discharge during life consisted of granular matter with epithelial cells, and very little true pus, the odour of it being that so commonly perceived in cancerous sores.

(To be continued.)

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, NOVEMBER 15.

ALFRED LEGGATT, Esq., V.P., in the Chair.

MR. CHARLES HUNTER narrated the particulars of a case of

DISEASED BRAIN,

the prominent symptoms being irregularity and distress of respiration. The patient, aged 70, had had a previous apoplectic seizure, and was partially recovered. When seen by Mr. Hunter, the chief symptom requiring treatment was distress in breathing. This dyspnœa occurred in fits of various duration. They gradually increased in severity until death. These fits were excited without any apparent cause, and oftentimes as he awoke from sleep. After death the veins of the brain were full of blood, the ventricles natural, the choroid plexuses full of gritty matter, and the white tissue of the brain of a slight yellowish hue. The cyst of the old apoplexy was found, and in the left corpus striatum was seen a reddish bruise-like mark. Some of the vessels forming the circle of Wilks were almost obliterated, and all seemed diseased and thickened. He attributed the cause to arterial degeneration interfering with the due circulation in the brain, at times causing local disturbances and imperfect nutrition. The case was treated by stimulants.

Dr. MARTYN narrated a case of

COMPOUND FRACTURE OF THE FEMUR.

The patient, aged 49, fractured his femur close to the greater trochanter, where the bone could be felt projecting. The external wound was small, and the case was treated by Dr. Martyn and Mr. Spencer Wells by the plaster of Paris bandage, which Mr. Wells had used successfully in the Russian war, and on several occasions in civil practice. The plan of application was thus described: The limb (to prevent the hair of the part from adhering) was first bandaged by a flannel roller, and then bandages (composed of coarse muslin) well charged with plaster of Paris, and moistened, were quickly applied to the part. The bandages extended from the toes to the waist, being continued the whole length of the limb and round the pelvis; the fractured part was additionally supported by folds of linen also charged with the plaster, and moistened, and which acted as splints, being placed outside and inside the limb. The wound of course was left uncovered, and the first rollers were removed at the end of a fortnight, and replaced by a many-tailed bandage, applied from half-way below the knee to the top of the thigh. The limb was secured to the foot of the bedstead at the beginning, to prevent eversion. Perfect cure without any shortening resulted.

Dr. MARTYN also narrated a case of

PROTRACTED LABOUR.

The breech presented, and the delay occurred in the passage of the head through the os uteri. There was also complete cessation of pains, and the delivery was effected after considerable time by manual interference.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, November 21:—

Crowther, James Edward, Halifax
Rush, William Arthur, Southminster, Essex

The following gentlemen also on the same day passed their First Examination:—

Forrest, John, King's College
Shea, Henry Gordon, London

As an Assistant—

Roberts, Thomas Andrew, London.

APPOINTMENTS.

ADEY.—Charles Augustus Adey, M.D. Univ. Edin., M.R.C.P. Lond., M.R.C.S. Eng., has been elected one of the Physicians to the East Sussex, Hastings, and St. Leonard's Infirmary.

BARTER.—Clement Smith Barter, M.R.C.S. Eng., and L.M., L.S.A. Lond, has been appointed Resident Physician's Assistant and Apothecary to the Bath United Hospital.

FIDDES.—David Fiddes, M.D. Univ. King's Coll. Aberd., M.R.C.S. Eng., has been elected President of the Aberdeen Medico-Chirurgical Society for the ensuing year.

GISSING.—John Stearn Gissing, M.R.C.S. Eng., L.S.A. Lond., has been appointed Consulting Surgeon to the Seckford Dispensary, Woodbridge, Suffolk.

LYNCH.—Henry Lynch, M.D. Univ. King's Coll. Aberd., M.R.C.S. Eng., L.A.H. Dub., L.M. Dub. has been elected Medical Officer and Public Vaccinator for the Dawlish District of the Newton Abbot Union, Devonshire.

MARSHALL.—Charles George Marshall, M.R.C.S. Eng., L.S.A. Lond., has been appointed Surgeon in Ordinary and Dispenser to the Seckford Dispensary, Woodbridge, Suffolk.

WATSON.—William Spencer Watson, M.R.C.S. Eng., L.S.A. Lond., of Southampton-street, Bloomsbury-square, has been appointed Surgeon to the Islington Dispensary, Upper-street.

DEATHS.

COOPER.—Lately, at Chatham, Canada West, George Thompson Cooper, formerly of Wolverhampton, aged 44.

FERGUSON.—November 19, at 48, Princes-square, Bayswater, Francis James Ferguson, M.D. Edin., M.R.C.S. Eng., aged 34.

JOLLIFFE.—November 24, George H. Jolliffe, of Crewkerne, Somersetshire, M.R.C.S. Eng., aged 86.

LEUBUSCHER.—Professor Rudolph Leubuscher, the eminent Professor of Berlin and Jena, recently died in consequence of abscess of the liver, aged 40. He was the author of numerous essays, especially relating to Pyschological Medicine; and his Handbook of Clinical Medicine is only just completed.

MIDDLEMASS.—November 17, on board the P. and O. Co's. steamer *Ceylon*, on the homeward passage from India, John Middlemass, Surgeon-Major Her Majesty's Madras Army.

NORTH.—November 15, Robert Eaton North, of Brownhills, aged 38.

PETTMAN.—November 23, Henry Pettman, of Sandwich, Kent, M.R.C.S. Eng., L.S.A. Lond., aged 65.

RIBERI.—November 18, at Turin, Professor Alexander Riberi, the most distinguished Italian Physician of the present day, and Physician to the King of Italy.

RITCHIE.—November 26, at 59, Woodlands-road, Glasgow, David Steel Ritchie, late of Tillicoultry, Clackmannanshire, L.R.C.S. Edin.

ROWLAND.—November 7, James Wyke Rowland, of Ironbridge, Shropshire, M.R.C.S. Eng., L.S.A., Lond., aged 58.

SHEARMAN.—November 21, William Shearman, of Canonbury Villas, Islington, M.D. Edin., M.R.C.P. Lond., for many years Senior-Physician to the Charing Cross Hospital, aged 94.

SPENCE.—November 24, at Letham Ladybank, N.B., William Spence, M.D., formerly Surgeon H.E.I.C.S., and for some time in the household of the Pasha of Egypt.

Uhle.—Professor J. P. Uhle, M.D., died November 4, aged 35, at Jena, whither he had been summoned from Dorpat, as Professor of Clinical Medicine, a year and a half only prior to his death. In 1856-7 he travelled in Egypt, in consequence of threatened phthisis, and wrote a good book on the influence of the climate of that country.

The Paris Faculty of Medicine.—The following are the Professors at the Faculty for the Session 1861-62, just commenced:—Medical Physics—Gavarret; Medical Pathology—Guillot; Operations and Apparatus—Malgaigne; Medical Chemistry—Wurtz; Anatomy—Jarjavy; General Pathology and Therapeutics—Axenfeld, as deputy for Andral; Surgical Pathology—Denonvilliers; Medical Clinic—Bouillaud, Piorry, Rostan, and Trousseau; Surgical Clinic—Laugier, Jobert, Velpeau, and Nélaton; Obstetrical Clinic—Dubois.

Call of Professor Moleschott to Turin.—The Minister of Public Instruction of the new kingdom of Italy, said to be an old friend of Professor Moleschott, offered this distinguished physiologist the choice of the Chair of Physiology at Turin University, or that of Physiological Chemistry at Pisa. As the former school numbers about 2000 students, and the latter about 200, it is not surprising he chose Turin for his sphere of action. A Dutchman by birth, but a distinguished German Professor for some time past, his appointment has been looked upon with extreme dislike in Italy, where the Germans are in such disfavour; but none of the Italian candidates for the post could pretend to vie with Moleschott in scientific reputation.

Death of Another African Traveller.—Dr. Peney, whose travels in the exploration of the sources of the Nile have recently excited much interest in France, has just succumbed to climatic influences near Galufi, 3½° N. latitude. The latest accounts received from him gave an interesting relation of the discovery of several new affluents of the Upper Nile, representing almost as many sources of the river. Within a space of 40 kilometres he counted no less than 100 of these smaller affluents, besides a very large one, the Loukouedi, taking its origin in Mount Rego. Great hopes were entertained of the success of this intrepid traveller, who, having been for some time chief Physician to the Viceroy of Egypt, appeared to have become thoroughly acclimatized. A good naturalist, and well supplied with instruments, much was expected from him.

North Staffordshire Medical Society. — The Annual Meeting of the above Society was held at the Railway Hotel, Stoke-upon-Trent, on November 21. A very able address on "Homœopathy" was delivered by the retiring President, James Gatis, Esq. The following gentlemen were elected to office for the ensuing year:—*President*—John Scott, Esq. *Treasurer*—Dr. Wilson Fox. *Secretary*—W. Haslam Davis, Esq. *Committee*—Messrs. R. Garner, Thomas Goddard, J. Walker, Charles Procter, W. H. Folker.

National Dental Hospital.—This Hospital, which is situated in Great Portland-street, was formally opened on the 11th instant. The chair was taken by Dr. J. Brady, M.P. The Chairman forcibly pointed out the necessity for Dental Institutions, not only as Schools of Dentistry, but as the means of affording relief to the poor in cases of disease of the teeth. Mr. Vidler, the Hon. Secretary, read letters from several men of influence, expressing regret at being unable to attend the meeting, and he stated that the subscriptions and donations received up to the present time amounted to about £300. The Chairman then declared the Hospital open. Votes of thanks were given to Mr. Robinson, Mr. Vidler, etc., which were duly acknowledged, and after a vote of thanks to the Chairman the meeting separated.

Dublin Obstetrical Society.—The first meeting of the Twenty-fifth Annual Session of the above Society was held on Saturday evening, the 23rd inst., Dr. McClintock, ex-Master of the Hospital, in the Chair. The Chairman read an interesting and highly practical paper on Tumours of the Labia and Vagina, prefacing his communication with some general observations, in the course of which he suggested that the lapse of a quarter of a century since the foundation of the Society had rendered some revision of its bye-laws necessary. A Committee was accordingly appointed to carry out such a revision, and to report on the alterations which might appear to be desirable. Dr. J. A. Byrne detailed the particulars of a case of rupture of the uterus, terminating in recovery; and Dr. MacSwiney exhibited a remarkably hard and resistant uterine tumour which he had the day before removed from the body of an elderly female.

An action has been brought in the Court of Queen's Bench by a Surgeon, to recover the sum of £20 5s., being the balance of his bill for medicines and attendance for several years, up to the year 1858. As the amount sought to be recovered was under £50, an order was made by the Lord Chief Justice, under the 19th and 20th of Victoria, cap. 108, for the trial of the action to take place in the County Court, and the cause was sent down, and came on to be tried before the judge of the County Court of Yorkshire, held at Halifax. The defendant's counsel there objected that the plaintiff had no right to recover, unless, as a condition precedent, he proved that he was a registered Medical Practitioner, registered under the new Medical Act, the 21st and 22nd of Victoria, cap. 90. The plaintiff was not prepared with that evidence, and, as a copy of the Register could not be procured in Halifax, although the trial was adjourned for that purpose, and the objection was held by the judge to be valid, the plaintiff was nonsuited. An application was then made to this Court for a new trial, upon the ground that the proof of registration was unnecessary, inasmuch as the Act was prospective only, and the action was brought for medicines supplied before the Medical Act passed. Mr. Manisty, Q.C., now showed cause against the rule, and contended that under the new Act the proof of registration was necessary in every case, before any person could recover for Medical attendance or for medicines prescribed and supplied by him. The 32nd section of the Act, the 21st and 22nd of Victoria, cap. 90, enacted that "after the 1st day of January, 1859, no person shall be entitled to recover any charge in any court of law for any Medical or Surgical advice, attendance, or for the performance of any operation, or for any medicine which he shall have both prescribed and supplied, unless he shall prove upon the trial that he is registered under this Act." Mr. Maule, who appeared in support of the rule, was not called upon. Lord Chief Justice Cockburn said he thought the reasonable construction of the section was, that it was intended to be prospective, and to apply to charges incurred after the act came into operation on the 1st of January, 1859. Mr. Justice Wightman and Mr. Justice Blackburn concurred.—Rule absolute for a new trial.

Supply of Atmospheric Air to Public Buildings.—The Commission appointed to report on the question of warming and ventilating the Palais de Justice, Paris, comes to the conclusion that the following quantities of atmospheric air should be supplied per hour for each individual placed in the respective localities: Hospitals, day and night, 80 cubic mètres; during the period of dressing the surgical patients, 120 mètres; and during an epidemic, 150 mètres. Laboratories, 60 mètres. Barracks, during the day, 30 mètres, during the night, 60, and during epidemics, 120 mètres. Prisons, 60 mètres. Amphitheatres, theatres, and assembly-rooms, 60 mètres. Schools, 30 mètres.—*Presse Belge*, No. 48.

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·842 in.
Mean temperature	37·5
Highest point of thermometer	52·8
Lowest point of thermometer	11·5
Mean dew-point temperature	33·1
General direction of wind	S.W.
Whole amount of rain in the week	1·02 in.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 23, 1861.

BIRTHS.

Births of Boys, 939; Girls, 914; Total, 1853.
Average of 10 corresponding weeks, 1851-60, 1623·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	728	706	1434
Average of the ten years 1851-60	630·3	645·0	1275·3
Average corrected to increased population	..	..	1294
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	5	29	3	6	5	1
North ..	618,201	2	1	21	6	6	6	5
Central ..	378,058	..	2	20	4	5	9	1
East	571,129	2	5	18	6	21	20	5
South ..	773,160	1	7	29	8	14	11	7
Total.. ..	2,803,921	5	20	117	27	52	51	19

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Hulke's letter on Uranoplastics shall appear next week.

Mr. Field's paper on Cleft Palate shall appear as soon as possible.

J. W. N.—We procured the specimen of Podophyllin administered in grain doses from Mr. Bullock, of Hanover-street.

Mr. Forman's cases shall appear as soon as possible; but there are many previously received waiting for insertion.

Queen's Hospital, Birmingham.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you allow me to call your attention to the fact that in the advertisement relating to the Queen's Hospital in your last Number, it is stated that there are vacancies for *Two Physicians and an Assistant-Physician.* This is an error, *only One Physician* is required.

By inserting this in your "Correspondence" columu you will much oblige Yours, &c. David Malins, jun., Secretary.

The Late Sir John Forbes.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It may be interesting to your readers to know, in addition to the particulars already published in your Journal, that the above Physician, in 1859, became one of the Editors of the Works published by the Committee of the "Ladies' Sanitary Association," the objects of which met with his warm approbation and valuable support, at a time when that excellent Institution was just started and struggling into public favour.

I am, &c.

An Ex-Member of the Ladies' Sanitary Committee.

November 25.

Colney Hatch Asylum.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Any person who has taken the trouble to look at the Annual Reports of the Visiting Justices of the County Asylums will very fully concur in the comments upon the rules, laid down by the Middlesex Magistrates, as expressed in your "Leader" of this week.

Those annual reports constitute but a series of self-glorification, and of laudation of "our" very fine management of these Asylums. The eternal "we," "we," "we," sickens the Professional reader, while the conviction is impressed upon the reader that the Medical—so-called "Medical"—Superintendent, is but a sort of upper servant to these self-constituted managers of a Medical institution.

Of their mismanagement the public have not often the means of learning the particulars; but on the occasion of the late election it has transpired only too flagrantly and conspicuously to be passed over in silence. Without casting any imputation upon the candidate appointed, it may be said that the inmates of the Asylums of the County of Middlesex are singularly under the care of Providence if they escape being consigned to the charge of individuals of inferior Medical attainments, when we learn that the rules and regulations at Colney Hatch, and, of course, also at Hanwell, are such that men of the highest reputation and greatest attainment, on becoming informed of the internal economy of the Asylums, turn in disgust and indignation from such servitude.

Do not the unfortunate inmates suffer from such a state of things? Witness the late inquests. Does not psychological and Medical science suffer also? Witness the fact that one of the late candidates, eager to devote his life and energies to the study and elucidation of the phenomena of insanity, was deterred from the task at the very onset. This gentleman laid before the Committee such a body of testimonials as the astonished eyes of Dogberries could never before have witnessed, among them in addition to many high University honours, a recommendation signed by one hundred and fifty-seven members of the Medical Profession.

Have the ratepayers good reasons to be content with such arrangements as shall deprive their poor afflicted brethren of such high and extraordinarily skilled Medical attendants? I opine not, and surely through some channel their voices should be made audible. What are the Commissioners of Lunacy about? I am, &c.

London, November 23. Omicron.

Carbonic Acid in Mineral Waters.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the last Number of your Journal an extract from an article in the *Saturday Review* is given, in which it is said that English Physicians are not sufficiently alive to the virtues of foreign mineral waters; and that no prescription can bring out of the Druggist's drawer a remedy as cunningly mixed as that which Nature has prepared. To this you have added the remark, that mineral waters were not in reality better than remedies combined by the skill of the Physician and the Chemist; and that the late Mr. Hargraves, of Tunbridge Wells, was in the habit, if any of his patients required steel, of prescribing the tincture, and not the water, which sat much less easily on the stomach.

Now, I am not willing to assert that mineral waters are, in all cases of chronic disease, absolutely superior to remedies prepared from our prescriptions; but they are certainly so in a great many instances, if the right water is chosen. Tunbridge Wells, however, is not a fair instance of a chalybeate as it should be. In a paper I read at a recent meeting of the Medical Society of London, I insisted upon the great importance of carbonic acid in mineral springs, and more especially in chalybeates, which it renders more palatable and agreeable to the stomach; and I remarked, that it was the deficiency of this constituent which made the English chalybeates inferior to those of the Continent, and indeed, scarcely fit for Medical use. The great superiority of such chalybeates as contain a considerable quantity of carbonic acid, as Pyrmont, Driburg, Schwalbach, and others, to artificial preparations of steel, was already acknowledged by Boerhaave, in whose writings the following remark occurs:—"In ferro est aliquod divinum, sed numquam præparata ejus artificialia id operantur quod acidulæ martiales;" and with this the present experience made at certain Continental spas entirely tallies. I am, &c.

18, Bryanston-street, W., November 25. J. Althaus, M D.

The Value (?) of the License of the Colleges of Physicians.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Allow me to call your attention to the imperfect manner in which the new Licentiateship of the Royal College of Physicians of London appears to be known.

In the Medical papers for November 16 and 23, I observe advertisements for Medical Officers for the Lincoln County Hospital, Manchester Royal Infirmary, and Chester General Infirmary; and in all these cases, which are but examples of what appear every week, the candidates are absolutely required to hold the diploma of L.A.C.; so that persons in my situation, who shortly expect to be L.R.C.P. Lond., but not L.A.C., are ineligible for these appointments. I know that the College has more than once had this anomalous position of their Licentiates brought before their notice; and the answer they return to all representations is, that their diploma is recognised by the Poor-Law Board. But, as yet, we have no evidence of such recognition; indeed, the advertisements which are constantly appearing from Boards of Guardians for Parish Medical Officers, who must be L.A.C., proves that the College has failed to bring the value of their Licentiateship before Boards of Guardians and Governors of Hospitals in an efficient manner.

The consequence of this is, that Medical Students avow that they dare not take the L.R.C.P. Lond., without also taking the L.A.C., thus the object of the former diploma is defeated.

If you, through your columns, by the insertion of this letter or otherwise, were to call the attention of the College and the public to these facts, and suggest that it is a duty that the College owes to its Licentiates to bring the subject in a proper manner before the Boards of Guardians and Governors of Hospitals throughout the kingdom, you would oblige a large class of General Practitioners and Medical Students.

I enclose my card. I am, &c.

November 26. Sigma.

COMMUNICATIONS have been received from:—

Dr. Graily Hewitt; Dr. Gray; Dr. Barnes; Dr. Maudsley; Dr. Spence; Mr. Malins; Mr. Browning; Mr. Milner; Mr. Chadwick; Mr. Hulke; Mr. Field; Registrar-General.

APPOINTMENTS FOR THE WEEK.

November 30. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

December 2. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Epidemiological Society, 8 p.m. Dr. Smith, "On the Yellow Fever of the Peruvian Andes."

Medical Society of London 8½ p.m. Lettsomian Lectures.—Dr. F. W. Mackenzie, "Application of Pathological and Physiological Inferences to the Prevention and Cure of Phlegmasia Dolens."

3. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Ethnological Society, 8 p.m. Right Rev. the Bishop of Labuan, "On the Dyaks or Aborigines of Borneo." E. B. Tylor, Esq, "On the Languages of the West Part of North America."

Pathological Society, 8 p.m. Meeting.

4. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Obstetrical Society of London, 8 p.m. Mr. Robert Ellis "On Cauterization by Electric Heat in the Treatment of Certain Diseases of Women." Dr. Hanks, "Case of United Children," etc.

Society of Arts, 8 p.m. Meeting.

5. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

Harveian Society of London, 8 p.m. Meeting.

6. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Western Medical and Surgical Society of London, 8 p.m. Dr. Fincham. "Case of Empyema in which the Operation of Paracentesis Thoracis was performed, followed by the Insertion of a Drainage Tube."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday next:—

By Mr. Fergusson—Harelip (two cases).

ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT

The Grosvenor Place School of Medicine,

DURING THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.,

Surgeon to the Royal Orthopædic and the Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital, &c.

LECTURE IV. *(Concluded.)*

Having now described to you the general direction and form assumed by the vertebral column in the so-called lateral curvature of the spine, let us proceed to examine

THE NATURE OF THE STRUCTURAL CHANGES AFFECTING THE BONES AND THE INTERVERTEBRAL CARTILAGES.

The earliest structural changes which occur in a lateral curvature of the spine are traceable, and I believe take place simultaneously, in the intervertebral cartilages, and at the articulations formed by the oblique articulating processes. These changes are essentially the result of atrophy and absorption produced by the long continued irregular distribution of the superincumbent weight of the head, upper extremities and thorax.

The intervertebral cartilages suffer from unequal compression, and become more or less wedge-shaped, according to the severity and duration of the curve, the thinning of the cartilage corresponding to the concavity of the curve. In the anatomical and physiological observations, I have already adverted to the effect of equal and unequal pressure upon the intervertebral cartilage. I will here only remind you that in the vertebral column we have nearly four inches in height of this soft elastic tissue which, during the day when equally compressed, diminishes in height or thickness from half to three-quarters of an inch, so that during the day we lose from half to three-quarters of an inch in height; but this is regained during the night, when the weight is completely removed by the recumbent position. If, however, during the day the intervertebral cartilages should be unequally compressed in consequence of any long continued disturbance of the equilibrium of the spinal column from any cause, the cartilages do not completely recover their natural form during repose, but remain permanently reduced in thickness by the compression in the concavity of the curve. The nature of any structural changes which the intervertebral cartilages may pass through as they become thinned by irregular compression, has not, so far as I am aware, been determined; but from several specimens in the more advanced stages, which I have examined microscopically, I have no doubt that these changes are essentially of an atrophic and degenerative character.

FIG. 7.

Section of the Spine from the same case as Figs. 5 and 6, showing irregular compression and absorption of the intervertebral substances and bodies of the vertebræ.

The bodies of the vertebræ also become more or less wedge-shaped, but at a much later period than the intervertebral cartilages. It is, however, a very common error to suppose that the bodies of the vertebræ become altered in form only in severe cases of curvature of long duration. In very slight cases of lateral curvature, when the deformity has existed a sufficient length of time, probably one or two years, the bodies of the vertebræ become perceptibly altered in form. In the specimen of slight lateral curvature which I now exhibit to you, the diminution in thickness both of the intervertebral cartilages and the bodies of the vertebræ in the concavity of the curves may be distinctly seen. Length of time, then, rather than degree of curvature, is essential to the production of these changes.

The bodies of the vertebræ do not present on section any unhealthy appearance—at least in the late stages at which I have examined them, and there are no reasons for suspecting any changes in the texture of the bones at an early period. In cases of long duration I have observed that the bones increase in solidity in the concavity of the curve; the cancellous texture of the bodies of the vertebræ on the compressed side becomes more dense or compact in appearance, and the thin layer of compact bone which naturally forms the shell, or outer surface, of the bodies of the vertebræ, becomes increased in thickness and density, so that it may be said to be replaced by a thick wall of compact bone of ivory-like appearance. This is shown in the specimen, a section of which is represented in Fig. 7. These changes are essentially of a reparative character, and calculated to arrest the progress of the curvature.

The oblique articulating processes, and more especially the articular facets on these processes, which form the only *direct articular connexions* between the separate bones of the vertebral column—the bodies of the vertebræ being separated from each other by a thick layer of elastic intervertebral cartilage—undergo very important structural changes at an early period of the formation of lateral curvature, I believe even at its commencement. In the specimens of lateral curvature which I now exhibit to you, as well as in all the specimens in museums, you may observe that the articular facets situated on the oblique articulating processes, are altered in their direction and aspects, according to the extent of the lateral deviations of the bodies of the vertebræ. In the lumbar region, where these articular facets are naturally nearly vertical in direction, looking inwards and outwards respectively, they gradually assume, in a severe case of lateral curvature, a very oblique direction, so that in aspect they are directed obliquely upwards and inwards, and downwards and outwards. In the specimen represented in Figs. 5, 6, and 7, this alteration is very remarkable; but more or less it exists in all cases, and a little reflection on the anatomical construction of these articulations will show you that it is impossible for any persistent deviation in the form of the spine to take place without an adapted alteration in direction of these articular facets. In severe cases, of long standing, such as that to which I have just alluded, the oblique processes themselves become very much altered in form, and sometimes, as in this instance, present an irregular enlargement and nodulated appearance surrounding the margins of the articular facets.

These very important deviations in the oblique articulating processes appear to have escaped the attention of nearly all writers on spinal curvature, and even in the works of the late Mr. John Shaw, published in 1823 and 1825 (h), which decidedly contain the most accurate pathological description and general account of lateral curvature in the English language, I do not find any mention of these deviations; but Mr. Alexander Shaw, who was long engaged in the same field of inquiry with his late brother, and also with his relative, Sir C. Bell (i), has accurately described the changes to which

(h) *Op cit.*

(i) "Practical Essays," by Sir C. Bell. Edinburgh: 1842. With "additional observations," by Alexander Shaw.

I allude, and adduced them in explanation of the rotation of the bodies of the vertebræ which had been previously observed by Mr. J. Shaw, and was also described at a later period by Sir C. Bell. Mr. A. Shaw's description is so clear and exact, and has been so completely confirmed by my own observations, that I make no apology for extracting the following quotation:—

"If we attend to the natural structure of the spine it will be seen that whilst we lean the body to one side, the pressure is thrown, almost exclusively, upon the articulating processes of that side; these processes, delicate as they are, being the only bony structures which check the lateral movements of the trunk. Hence, when a habit is acquired of inclining to one side, or of resting upon one hip, as in sitting, the sharp edges of these small points of bone receive the weight of the entire body. But as the articulating processes are remarkably soft, and are imperfectly formed at the age of puberty, it follows that they will become wasted by absorption when this position is long persisted in, and an inequality of the length of these two lateral props, on which the vertebræ rest posteriorly, will be the consequence, those of the concave side being shorter than those of the convex. 5th. In lateral curvature of the spine we have a distinct demonstration that the articulating processes give way more extensively than any of the other parts of the column. This is evinced by the rotation which the spine makes in its perpendicular axis, at the same time that it inclines laterally. The joints of the articulating processes being situated posteriorly, as well as laterally, the spinal column cannot yield in their direction, without wheeling partially round; and it is owing to this rotation that the transverse processes, and the ribs, are directed obliquely forward upon the concave side, and obliquely backwards upon the convex side of the curvature, thus giving rise to a fulness or swelling on the one hand, and a depression or sinking inwards on the other" (k).

This is the earliest description I have been able to find of the appearances to which I now desire especially to direct your attention, and it is somewhat remarkable that it has not attracted the notice of any subsequent writer on the subject of lateral curvature. Even Sir Charles Bell, who wrote ten years afterwards, and carefully described the rotation of the vertebræ as a most important element in the distortion, passed by unnoticed the facts described by his relative, Mr. A. Shaw. To me it appears that the account given by Mr. Shaw of the mode in which these structural changes are induced, affords, at the same time, a satisfactory explanation of the way in which the rotation of the bodies of the vertebræ is produced, and is certainly quite in accordance with my own observations.

The transverse processes are altered both in direction and form. In their general direction and relations to the soft parts they are altered as a result of the horizontal rotation of the bodies of the vertebræ, so that when the curvature is in the lumbar region, the transverse processes in the concavity of the curve are depressed towards the abdominal cavity, and in a severe case cannot be felt by external examination; whilst those on the convexity of the curve project backwards towards the skin, and in a severe case, as in that represented in Figs. 5, 6, and 7, rise to the level of the apices of the spinous processes, and can readily be felt along the outer margin of spinal muscles, which they also protrude backwards and render prominent. This effect on the muscles, and the important errors of diagnosis to which it has led, will be again adverted to. This deviation in direction of the transverse processes is extremely important in a diagnostic point of view, and will enable you certainly to diagnose a curvature in the lumbar region in cases in which no lateral deviation of the apices of the spinous processes exists. Figs. 5 and 6 especially illustrate this condition. The transverse processes, it should also be mentioned, become widely separated from each other on the convexity, and approximated to each other on the concavity of the curve.

The transverse processes also become very materially *altered in form* in severe cases of long standing, as exhibited in Fig. 6. They may become attenuated and project backwards in a curved or horn-like form, with a varying inclination upwards or downwards,—a change apparently produced by the long continuance of irregular muscular action; or they may become flattened from above downwards by the mechanical pressure of the superincumbent weight, when from the severity of the curve, one or two of these processes belonging to the lowest vertebræ rest upon the crest of the ilium. In the case represented in Fig. 6, the transverse process of the fourth lumbar vertebra on the left side rested on the crest of the ilium, and was not only flattened from above downwards, but also bent upwards by pressure, and on its flattened and expanded extremity an articular surface covered by fibro-cartilage was formed where it rested upon, and in a spurious manner articulated with, the crest of the ilium. The transverse process of the fifth lumbar vertebræ in this case was unfortunately sawn through in removing the parts, but must have been much distorted and altered both in direction and form.

I have now enumerated the structural changes affecting the bones and the intervertebral cartilages, which, I believe, essentially and necessarily exist in all cases of lateral curvature of the spine, however slight; but varying, of course, in degree according to the severity and duration of the deformity. An important practical question arises at this point of our inquiry, viz.:—

Do the Structural Changes above described, as affecting the Bones and Intervertebral Cartilages in Lateral Curvature, occur equally in all classes of Cases, or only in those associated with, or supposed to depend upon, Rickets? Contrary to the opinion of some writers on spinal curvature, I believe the structural changes above described occur equally in all classes of cases, and, moreover, that there is no special liability to lateral curvature of the spine in cases of rickets consequent upon the condition of the bones of the vertebral column in this affection. In this opinion I differ from Mr. Tamplin, who states that, "In the greater number of cases, the bones of the spine, ilium, or chest, do not suffer; the affection is but a simple malposition, implicating, more especially, the passive attachments or ligaments, and the position of the muscles. . . . . When the curvature commences under five or six years of age, as it commonly does in rachitic cases, an actual compression of the bodies of the vertebræ occurs in the concavity of the curve" (l). And again at page 11, "The curve with rachitic combination is of all others the most serious, inasmuch as here the bones are incapable of performing their proper functions; that is, of acting as a support and fulcrum for the muscles, without yielding in the one or the other direction. In such cases an actual alteration of the bones takes place, so that they present a serious addition to the simple malposition common to other cases, as well as a more severe distortion of the spine and chest, than either of those to which I previously alluded. It is by no means uncommon to find this rachitic state associated with tubercular disease."

It has been too much the custom of writers on spinal curvature to assume that cases of severe lateral curvature occurring at an early age, and in which the bones necessarily become much altered in form are essentially of a rachitic nature, but I believe a serious practical error is involved in this opinion, from an imperfect consideration of the evidence which should induce us to assign these cases to the rachitic class of deformities. This question is worthy of our most attentive consideration, and I believe the line between the rachitic and other classes of lateral curvature of the spine cannot be drawn too broadly for practical purposes, because the rachitic is the only form of lateral curvature associated with deformity of the pelvis, and, therefore, the only form in which any danger in child-bearing need be apprehended, or any obstacle to marriage assigned upon Medical testimony. The most severe cases of lateral curvature of the spine occurring either in childhood or in youth, which have come under my observation have certainly not been connected with rickets. The children in these cases have not presented the ordinary appearances of rickets either in their general conformation, such as dwarfishness of stature, principally depending upon the disproportionate shortness of the legs, giving an appearance of a long body and short legs; the peculiar conformation of skull, and aspect of features; or in the peculiarities affecting the long bones, such as enlarged epiphyses and curvatures in different directions, all of which are con-

(k) *Medico-Chirurgical Transactions*, vol. xvii. London: 1832. See a paper on "A Peculiarity in the Conformation of the Skeleton in Rickets," by Alexander Shaw. Page 467.

(l) "On Lateral Curvature of the Spine," by R. W. Tamplin, page 16. London: 1852.

stantly present in cases of rickets. Unless we have present these peculiarities in the conformation of the skeleton and condition of the bones, which have been so ably described by Mr. A. Shaw (m) as essentially characterising the rachitic condition, I believe we are not justified in assuming that a case of lateral curvature, however early it may occur, or however severe it may be, depends upon rickets. The most severe cases of lateral curvature which I have seen in children have not presented any of these indications, but have appeared to depend essentially upon constitutional causes generally associated with an hereditary disposition to curvature of the spine, frequently running through two or three generations, and also connected with a history of consumptive tendency in the family.

The observations of Mr. Tamplin above quoted, viz., *that the rachitic lateral curvature commonly commences under five or six years of age, and that it is by no means uncommon to find this rachitic state associated with tubercular disease*, appear to prove that cases are alluded to which can have but little claim to be considered as depending upon rickets, and are, doubtless, the same as those to which I have adverted as depending principally upon constitutional causes, generally associated with an hereditary tendency. I need scarcely observe that the connexion here assumed to exist between rickets and tubercular disease, is opposed to all modern pathology. The highest authorities on rickets agree that this affection is in no degree dependent upon, or connected with, tubercular disease, and generally it is considered that these affections are antagonistic to each other. The early period, also, at which lateral curvature of the spine is said to take place, viz., under five or six years of age, in cases of rickets, is entirely opposed to my own experience and observation, which lead me to believe that lateral curvature occurs in such cases at a late, instead of an early period,—generally after ten or twelve years of age and sometimes much later,—and depends more upon the inequality in the length of the legs from rachitic deformity, than upon any morbid condition of the vertebræ. I think, however, we may very safely conclude that no special liability to lateral curvature exists in cases of rickets in consequence of any abnormal condition of the bones, and that in the rachitic class of curvatures of the spine, the structural alterations are not greater than in other cases; indeed, I believe they are not so great, because the rachitic curvatures take place at a later period of life than the cases essentially depending upon constitutional and hereditary causes which occur in infancy and early childhood.

ORIGINAL COMMUNICATIONS.

FIVE CASES OF LITHOTOMY.

By ARMSTRONG TODD, M.B., M.R.C.S.

The reports of any cases of stone in the bladder are always of use to the practical Surgeon, because from a large collection of cases much may be learned to throw light both upon the diagnosis and treatment of this class of disease.

The points where improvement in our practical knowledge is required appear to me to be, first, in detecting stone when it exists, and determining its size and composition; secondly, as to its removal we want to draw the line correctly between the cases in which lithotomy or lithrotity is the most applicable operation, and, if such exist, to discover some means of dissolving the stone without injury to the bladder or danger to the patient. It is not my object to enter upon the consideration of these matters at present, but the following cases may be of use especially in distinguishing the cases for lithotomy or lithotrity:—

Case 1.—A shoemaker, aged 38, came to the Hospital for Stone and other Urinary Diseases on February 20, 1861. He stated that for two years and a half he has suffered with pain in micturition, passing blood with the urine, and other symptoms of stone. He consulted some of the Medical men in the district in which he lived, and was a patient of the neighbouring Dispensary. He then obtained admission into the Physicians' Wards of St. George's Hospital, when it was suspected he had stone, and consequently he was sounded four times, but no stone was found. He states that he was then informed that his complaint was not stone, but enlargement of the bladder, and under treatment for this disease he remained in the Physicians' Wards for a period of five weeks. He was then made an out-patient, and continued so until his admission, on February 20, into the Hospital for Stone and other Urinary Diseases. He appeared in bad health, thin and care-worn, passed blood in considerable quantities with the urine, requiring to make water constantly, and suffering severely whenever he did so. The introduction of the sound gave him intense pain, and caused profuse hæmorrhage. For private reasons of his own, he was unable to come into the Hospital until March 6, during which time I endeavoured, by the usual means, to get his general health into a better state, and his urethra and bladder less irritable. After his admission into the Hospital he was sounded three or four times, the stone being distinctly felt on each occasion; but there was little or no diminution of the hæmorrhage and pain experienced on previous soundings. He was kept quiet in the Hospital, well fed, and was ordered anodyne medicines. After full consideration of all the circumstances of the case, it was considered preferable to perform the operation of lithotomy to that of lithotrity, although it was well known the stone was small and easily crushable, but this unanimous opinion was come to in consequence of the very vascular and irritable state of the bladder and urethra. On April 1 he was ordered to have half-an-ounce of castor-oil, and the following morning an injection of warm water. On April 2 I removed, by the lateral operation, a stone, oval in shape, its longest diameter being about one inch. It was unusually light, of dark brown colour, and when cut through the centre it was found to be honeycombed inside. He suffered great pain when the effects of chloroform had passed away, but there was no hæmorrhage or any bad symptoms. He was given forty drops of tinct. opii, and subsequently during the evening he had two additional doses, one of twenty-five drops and the other thirty drops. I saw him on the morning of April 3, he had slept well during the night, was suffering no pain, his pulse was quiet, no fever, and some urine had passed through the urethra. I visited him every day, and no bad symptom presented itself. On the 6th the urine ceased to pass through the wound, and on the 17th the parts were so much healed, and he had so much improved in health, that he was allowed to sit up. Every day he progressed favourably, and on the 30th he left the Hospital to follow his usual avocations. I have seen him occasionally since, and he enjoys good health, and has become quite strong.

Case 2.—A porter, aged 30, states that he suffered from pain in his back, difficulty in making water, and other symptoms of stone, for a period of four years. Strange to say he did not apply to any Medical man for relief until January, 1860, but took all kinds of nostrums which his friends recommended. He now consulted an eminent Surgeon at his private residence where it was not his practice to attend patients of this man's class. However, he told him he suspected he had stricture, and gave him an order for admission into St. Thomas's Hospital. He remained here an in-patient for three weeks, during which time he was treated as if he had a stricture of the urethra, and a catheter (No. 9, he says,) was passed every day; he was then turned out and ordered to attend the out-patient department twice a-week, which he continued to do for four months. During this time he received strengthening medicine, and had a catheter passed at each visit. Not finding any relief from the symptoms which he complained of, he went to Guy's Hospital and was here told that he was suffering from "the effects of a badly treated gonorrhœa," and he states that balsam copaibæ, etc., were prescribed for him; he continued to take this medicine for more than a month, after which he attended less regularly; however, he went occasionally and received medicine, at last he gave up all treatment until he applied to the Hospital for Stone, on February 22, 1861. He walked in a peculiar manner with his legs apart and complained of very great pain in the back and in the extremity of the penis, especially when, during micturition, the water suddenly stopped. The introduction of a sound, which gave him but little pain, at once showed that there was a stone of large size in the bladder, he was accordingly admitted into the Hospital. Rest, good food, and anodyne medicines were his treatment for a few days, and then in consultation it was thought that, as the urethra

(m) On a Peculiarity in the Conformation of the Skeleton in Rickets, a paper by Mr. Alexander Shaw in Vol. xvii. of the Medico-Chirurgical Society's *Transactions*. London: 1832.

and coats of the bladder were apparently healthy and the cavity of full size, this was a case for the crushing operation, so on the 4th of March the lithotrite was introduced and the stone broken apparently in two pieces; this was thought sufficient for the first time. He was ordered to remain quiet in bed, and given emolient drinks, etc. Not much irritation was produced and some small particles of stone passed with the urine. On the 11th the stone was crushed again, and that night and next day considerable portions passed by the urethra, causing great pain and irritation, which was followed by evident symptoms of inflammation of the bladder. On the 22nd the tongue became furred, the pulse 120, intermittent; his breath had a strong ammoniacal odour. He was ordered two grains of quinine, with dilute sulphuric acid, three times a-day. On the 24th the quinine was increased to three grains three times a-day; and on the 26th he was very mueh better. He continued to improve in health under the quinine treatment, and I determined not to resume lithotrity, but to continue the quinine until his health became sufficiently restored to permit of lithotomy. On April 2 he was thought to be in a fair state for operation. So he was ordered some castor oil that night, and an injection of warm water on the following morning. In the afternoon of the 3rd he was put under the influence of chloroform, and I removed by the lateral operation a large, weighty stone, and a moderate-sized piece, evidently a fragment broken off by the lithotrite. An opiate was administered as soon as he had been got to bed, and he was kept perfectly quiet. April 4 he was doing remarkably well, and continued so well that on the 22nd he passed water through the urethra freely, and on the 23rd no water passed by the wound, but he complained of pain and uneasiness in the left groin and down the leg, I ordered the wound to be poulticed; and on the 24th a large lump of fibrine, mixed with stringy mucus, coated with lithates, came from the wound, and the urine began again to flow through this opening. He obtained considerable relief, and continued improving until May 4, when he complained again of pain in the groin and in the right testicle, which was tender to the touch. Mercurial ointment was applied to the testicle, and fomentations and poultices were freely used both to the testicle and the wound; but notwithstanding all care, the testicle continued to inflame and enlarge, the wound lost its healthy appearance, and the pulse became again intermittent; the tongue got white, and his appetite failed. No medicine seemed to have any influence upon him, so on May 23 I had him removed a little way out of London to a place taken for the purpose, and sent his nurse with him. I visited him every day, and at each visit a wonderful improvement was observable in his general health, appetite, and strength; but an abscess formed near the testicle, which burst and rapidly healed; the wound looked more healthy, but still the urine flowed through it. Nothing particular happened until June 10, when he again complained of pain and diffieulty in making water. Poultices and fomentations were again resorted to, and on the 14th a large quantity of pus was discharged through the urethra, which gave him instant relief, but, notwithstanding this, his general health did not fail, he was able to take his mutton-chop and porter, and as a tonic, bark and sesquicarbonate of ammonia every day. From this time he regained his health and strength, and returned to the Hospital on July 23, looking strong and well, but still at times a small drop or two oozed out from the wound. On the 31st he left for his own home. By my advice he got a recommendation for the Convalescent Hospital, where he spent a month. The fragments of stone which passed after the operation of lithotrity, together with those removed by lithotomy, weighed ℥j ℥iij. ℈ij. The body of this calculus was extremely hard, so much so that it was very difficult to cut it with a lapidary. The outside, which was the only part broken by the lithotrite, was soft, and consisted chiefly of phosphates.

In reporting these cases it is not my object to cast a slur upon the Surgeons of our General Hospitals; on the contrary, I feel sure that there is not a more talented body of men in any country than our London Hospital Surgeons; but there seems to be a defect somewhere, and it proves the truth of the statement made in the prospectus of the projected "St. John's Hospital for Stone," that, "if there be one class of maladies requiring more special attention than another, it is this."

16, Old Burlington-street.

(To be continued.)

HOLIDAY NOTES ON SOME CONTINENTAL SPAS.— AIX-LES-BAINS.

By HERMANN WEBER, M.D., F.R.C.P.
Physician to the German Hospital.

(Continued from page 552.)

With regard to the nature of the complaints treated at Aix, the following list, taken from Dr. Despine's "Indicateur Médicale d'Aix-les-Bains" (p. 38), shows the proportion of diseases as they come under observation:—

Rheumatism and gout	390
Diseases of the skin	169
Scrofulous affections	107
Diseases of the bones	92
Syphilis	79
Nervous affections	73
Paralysis	56
Diseases of the throat and lungs	34
	1000

Rheumatism and gout, in their most varying forms, stand highest in number among the pathological conditions treated at Aix. With regard to simple chronic rheumatism, attacking the fibrous and muscular tissues, I have no doubt that Aix is one of the best Spas in existence. It is principally to be recommended in the more torpid cases, where, in addition to the mere warm water bath, a more active stimulation of the skin, through douches, vapour-baths, and sweating, is desirable, while, in some of the more excitable conditions, the simple or negative thermal springs of Wilbad, Teplitz, Gastein, and Ragatz, are, if not preferable, at all events equally useful. In cases where the rheumatic diathesis is, as it often happens, based on and combined with dyspepsia, the waters of Vichy may be taken internally, in conjunction with the external application of those of Aix; in some of these, where the dyspepsia is the predominant element, the stay at Vichy itself would be preferable. Cases of sciatica are in general eminently benefitted by the treatment at Aix. Amongst the rheumatic affections of the joints, those in whom the effusion is principally serous, and in which there is no considerable alteration of the membranes of the joints, are most frequently cured by the slightly mineralized thermal waters, amongst which Aix, through the clever management of its resources, stands very high. Those rheumatic affections of the joints in which there is much thickening, are often the expression of a scrofulous taint; in these the muriated thermal waters, as those of Wiesbaden and Aix-la-Chapelle, and of Baden, in the Aargau, act more energetically, as also the similarly constituted, though less thermal waters of Nanheim, Creuznach, and Oeynhausen. Gout—genuine gout—hereditary as well as acquired, is, I believe, never cured at Aix, although many gouty patients resort to it; gout, we know, does not consist in the affection of a joint, but in a diathesis manifesting itself by the latter. The general health, however, and the stiffness of the joint, caused by repeated attacks of the gout, may be improved by the cautious use of the resources of Aix, but cautious the treatment ought to be, as it may otherwise excite a thorough fit of the gout. Rheumatic gout is more benefitted by the use of Aix than simple gout, and this, to some degree, in proportion to the greater predominance of the rheumatic element. The internal use of the carbonated alkaline waters assists, in such cases, the external application of the Aix waters.

Amongst the diseases of the skin, great advantage may be expected in those cases which depend principally on a slight alteration or disturbed function of the skin, without constitutional disorder, and also in those affections which are of parasitic origin, while those which depend on a morbid diathesis, are not permanently cured. In psoriasis of long standing the treatment of Aix has rarely a lasting effect. In chronic eczema the stronger and long-continued douches are frequently too irritating, while the simple vapour-bath, and the common warm bath of Aix are useful; a certain proportion of the water of Marlioz may be added to the water of Aix. Where the origin is scrofulous, the internal use of the springs of Challes and Coise is to be recommended; but, in the more torpid forms of scrofula, I would expect more good

from the muriated saline Spas, impregnated with bromine and iodine, as Nanheim, in Hesse-Cassel, Creuznach, in Rhenish Prussia, and Oeynhausen, in Westphalia; the thermal waters of Leuk or Loeche, with their great proportion of salts of lime, and their truly alpine climate, enjoy likewise, in this respect, a high reputation. In chronic erysipelas the thickening of the cutaneous and subcutaneous tissue may be removed at Aix, and, through this, the tendency to relapses; here, again, the internal use of the springs of Coise or of Challes is advisable. The various forms of prurigo are often cured, or, at all events, much mitigated. Chronic urticaria, depending, in general, on a constitutional diathesis, is, in the majority of cases not altogether removed at Aix, though the internal use of the waters of Coise, and in some instances of the chalybeate spring at Saint Simon, combined with the milder external applications of the Aix water, is attended with general and local improvement. It is not without interest to remark, that Mr. Ughetti, a distinguished veterinary surgeon, has successfully treated horses affected with farcy eruptions and chronic catarrh by the internal use of the waters of Challes.

Scrofulous affections, especially those of the glands, and scrofulous ulcers, are much benefitted by the jodated and bromated waters of Challes and Coise. Rachitis, too, is advantageously combated by the same waters, and the swimming-baths are especially useful in rachitic patients.

The water of Coise is considered a powerful remedy against *goître*, and a Sardinian Commission on *goître* and cretinism in the Sardinian States, has ascertained that the inhabitants of the village of Longemalle, who fetch the water for daily use from Coise, are alone exempt from *goître*, while this affection is very prevalent in the whole neighbourhood.

Syphilis, in its various stages, is never cured by the thermal waters of Aix, although their use may in many instances assist the specific treatment. According to Dr. Vidal's assurance, the waters of Aix may serve as a means of diagnosis in cases of doubtful nature, as syphilis, if the system is still impregnated with it, unmistakeably manifests itself during the use of the waters.

Mercurial cachexia is treated with great advantage by the external and internal use of sulphur waters.

Among the paralytic affections, the different kinds of hemiplegia are in general connected with some organic alteration in the brain or its blood-vessels with diseases of the heart or kidneys; Aix can in such cases do very little good, and much harm. In the rare instances of rheumatic hemiplegia, however, much benefit will be derived, and some also in hysterical hemiplegia.

Paraplegia occurs much more frequently without organic lesion of the substance of the spinal marrow itself, and may be of rheumatic, gouty, herpetic, traumatic, and hysterical nature; it may be the consequence of acute diseases, as typhus, scarlet fever, and diphtheria; it may be caused by pregnancy, suppressed menses, and hæmorrhoids; it may be the effect of lead-poisoning and other noxious influences. In most of these forms of paraplegia the treatment at Aix may be advised with much probability of success. In the myelitic conditions causing paraplegia, on the contrary, and in all cases of organic alterations of the spinal marrow, neither the baths of Aix, nor any other mineral waters can have a curative effect. There are, however, some forms of paraplegia, due probably to rheumatic thickening of the membranes of the spinal marrow, which present very much the appearance of organic affections of the marrow itself, and in which yet a complete cure may be wrought by the means at the disposal of the Physicians at Aix. Thus Dr. Vidal mentions a case of Dr. Rayer's: a man, aged 35, while affected with rheumatism, perceived first weakness of the legs, afterwards formication, intense pain, inability to stand, and later, atrophy of the legs and arms. Rayer himself had in this case considered the nervous centres affected, as his own words were, "Ces symptomes, rapprochés de quelques autres, me firent penser que le rheumatisme avait aussi porté son action sur le cerveau et la moelle épinière; dès le début du mal en effet, insomnie, perte de mémoire, affaiblissement du sensorium, annoncé par des pleurs fréquents; enfin, le malade ne put se tenir debout sur les jambes, même soutenu par ses gens. . . Plus tard, les quatre membres se sont atrophiés."—Essai sur les Eaux Minerales d'Aix-en-Savoie. Par le Dr. F. Vidal. Chambéry: 1851. P. 59. After forty days' treatment at Aix, to which place Dr. Rayer had sent his patient, almost all the morbid symptoms had disappeared, and the recovery thus commenced became afterwards complete.

Cases of chronic catarrh of the mucous membrane of the bronchi, of the trachea, and of the larynx, uncomplicated with tubercular disease, and also the chronic catarrh, or inflammation of the mucous follicles of the pharynx and larynx (clergyman's sore throat, follicular disease of the pharyngo-laryngeal membrane), profit in general much at Aix. It is in these conditions that the internal use of the waters of Marlioz and Challes, and the inhalation of the vapours of these waters is eminently beneficial. Other sulphuretted waters, too, as Weilbach, near Frankfort, and those of the Pyrenees, are very useful in such cases. It is mainly to the action of the sulphur that this effect is to be ascribed, an action which in this country is perhaps not sufficiently recognised.

The season for Aix is from May to September, but it is contemplated, if I mistake not, to make arrangements for the use of the waters during the whole year. As the winter and spring at Aix are said to be mild, there is every reason to believe this advisable. It is, however, under these circumstances, particularly desirable that accurate meteorological observations should be made at Aix, and should be published, in order to enable foreign Medical men to judge for themselves whether a stay at that place during winter or spring can be considered congenial to their patients.

The Medical men at Aix deserve great praise for the manner in which they study each single case, and meet it by the application of their particular remedies. They are every morning from seven to nine o'clock, when most of the douches and vapour baths are taken, in the Thermal Establishment, in order to superintend the treatment, and answer the questions which may be addressed to them by their patients. In addition to Dr. Vidal, who is the inspector of the baths, and Dr. Despine, the honorary inspector, I may mention Drs. Forestier, Davat, Dardel, Blanc, and Guilland, who all are well acquainted with the use of these waters.

The manner of living at Aix is rather similar to that at Vichy; in both the principal meals are at 10 a.m. and 5 p.m., when the table d'hôtes are rather sumptuous, and for many invalids too tempting.

The Hotels (Hôtel Imperial, Hôtel Guilland, Hôtel Venat, Hôtel de l'Univers, Hôtel du Globe) are good, though perhaps rather inferior to the first-class hotels of the principal German spas. There are also many boarding-houses and *hôtel garnis*. In the Casino (assembly rooms), of which the late Count Cavour was President, there are reading-rooms, and balls or concerts are given almost daily.

MELANOTIC (?) ENCYSTED TUMOUR SIMULATING BRONCHOCELE.

By JAMES McCRAITH, M.D.,

Surgeon to the British Seamen's Hospital, Smyrna.

A YOUNG woman nursing her first child, perceived a tumour on her neck during the latter months of pregnancy. Since the birth of the child (six months old) the tumour continued to increase in size. Getting uneasy on the matter, she came to Smyrna, from one of the chief towns in the interior, and consulted me on the subject. To the eye the tumour appeared an ordinary bronchocele, more protuberant to the right side, not quite symmetrical,—which is often the case in bronchocele. It occupied quite the position of bronchocele; in fact, one or more Medical men, on superficial inspection, considered it such, and advised her not to have recourse to any operative proceedings. Upon examining it more closely, however, it was easy to see that it contained fluid. It was bound down by the fascia attached to the thyroid cartilage, and prevented from mounting in the neck in that direction. I came to the conclusion that it might be punctured, as it had been increasing considerably lately, and causing much inconvenience.

In this opinion Dr. Wood of this city concurred, and with his assistance I punctured the tumour with an ordinary hydrocele trocar. The contents were fluid, about six ounces, viscid, and black as ink. After emptying the sac, I injected a few drachms of tincture of iodine. None of the iodine returned. There was some pain at the time. As in hydrocele, the tumour was nearly as large as ever the

following day: there was pretty severe inflammatory action, but in ten or twelve days the sac contained as much fluid as ever, and as the patient was extremely anxious to get home for private affairs, I again punctured the sac; but this time the contents were a dirty purulent fluid with flaky matter, which required the passing of a probe, and considerable breaking down, to get it to pass through the canula. With some trouble the sac was again emptied, and again injected with three or four drachms of tincture of iodine, as before. But after the lapse of fifteen days the sac was as large and full as ever. I believe that at the end of a few months the result would be absorption; but as the patient *would* have a cure, and could not remain in Smyrna much longer, I passed two silver wires as a seton through the tumour, in a direction from below upwards, letting the contents drain away on a poultice. The fourth day the inflammation was considerable, so I withdrew the wires. For the three or four following days there was fever, stiffness of the neck, and general pains over the body. Purgatives and salines, with cold applications to the tumour. The fever abated, the general and local symptoms yielded, the punctures remained open, and at the end of three weeks the cure was certain, and nearly complete when she left for home.

The black fluid, examined under the microscope, showed a large quantity of cholesterine, some exudation corpuscles, a few blood corpuscles and oil globules, and some granular matter. The blood corpuscles and oil globules were few, and may have come, in part at least, from the puncture of the operation (the blood), and from the oil used on the trocar (the oil globules.) Upon passing this black fluid through filtering paper (it passed easily), the colour remained as black as before; the other ingredients were, of course, left on the filter. This latter experiment, I believe, proves the fluid to have been true melanotic, and that its colour was not due to any colouring matter left by disintegrating blood corpuscles.

Smyrna.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,
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AND BY

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CASES OF PARALYSIS IN SYPHILITIC PATIENTS.

ROYAL FREE HOSPITAL.

(Cases under the care of Dr. O'CONNOR.)

Case 1.—*Paralysis of the Right Arm and Leg, and of the Left Leg—Symptoms of Dementia (loss of Memory, etc.)—History of severe Constitutional Syphilis—Recovery to a Great Extent under the Use of Antisyphilitic Remedies.*

A man, age 45, was admitted into the Royal Free Hospital, under the care of Dr. O'Connor, on the 13th of July last. The person who accompanied him to the Hospital left directly after he had placed the patient within the door, without giving any history of the case, or where he was brought from; nor was it even stated what his name was: he appeared to be in a fit, and was quite unconscious.

Dr. O'Connor stated that when seen by him on the day of his admission, the patient was very restless and excited, perfectly unconscious, staring wildly about him; the vessels of the conjunctivæ were much injected; there was complete paralysis of the whole of the right side, and partial paralysis of the left lower extremity. The upper and lower extremities of the right side were cold, the pulse at the wrist was 60, and feeble; he could not give utterance to a word, and his urine and fæces were passed involuntarily; there was great wasting, and the muscles felt flabby. Pinching or tickling any part of the right side or right extremities did not excite any feeling, nor did tickling the sole of the right foot excite reflex action. The patient appeared to have been subjected to active treatment before admission to the Hospital, which was evidenced by the raw surfaces caused by recent blistering of the whole of the head and nape of the neck. He could not be got to swallow anything, neither solid or fluid. Notwithstanding the wildness of look, there was also a well-marked cacheetic condition.

Cases of this sort, Dr. O'Connor said, depending on syphilitic disease, are much more common than they are supposed to be; and he felt satisfied that syphilitic deposit in the brain and spinal cord, as well ast heir covering s, was a fertile source of many paralytic affections; and this he believed to be a case of the kind. The patient was directed to use a suppository of from ten to fifteen grains of mercurial ointment, made up with liquorice powder, every night.

On the 17th, the fourth day after his admission, he was much more tranquil; he had beef-tea daily since the 15th.

22nd.—The constitutional effect of the mercury was fully developing itself, and the suppository was ordered to be continued for a few days longer.

On the 27th there was complete restoration of sensation over the whole of the right side, except the right hand, where it was not perfect; he could grasp anything with it, but not with the same force or power as the left. He gained flesh, and became quite plump.

It appears that he had led a very dissipated life, and his own account justified the opinion Dr. O'Connor formed of his case when first admitted to this Hospital, for he stated that eight years ago he had chancres, followed by sore-throat and eruptions on the skin, of which he thought he had been cured. About four weeks before being brought to the Hospital he was taken decidedly ill, though complaining of rheumatic pains for some time previously; his memory gradually failed him, he became paralysed, and had loss of speech; there was a great deal of wildness and incoherency of manner. Until the day before his admission, he was attended by a Practitioner in the neighbourhood.

August 4.—The improvement is such that he can walk out of the ward with only the aid of a slight stick, and take exercise in the square of the Hospital for two or three hours. Five grains of the citrate of strychnia and iron were now ordered to be taken three times a-day, and ultimately increased to seven and a-half grains, the dose of strychnia being then the eighteenth of a grain.

From August 4 the condition of the patient daily improved, his speech was completely restored, and he could walk about the square of the Hospital for hours at a time. His appetite was very good, and he slept well. The paralysis was confined only to the left hand and arm, but was disappearing under the influence of electro-galvanism. In this state he was discharged, on September 22, on account of his becoming very troublesome in the ward, and a source of annoyance to the other patients.

Dr. O'Connor remarked that for some days between the discontinuance of the mercurial and the use of the strychnine and iron, he prescribed iodide of potassium, five grains of which, with liquor potassæ and infusion of calumba, were taken three times a-day, and he wished to observe that his reason for ordering it was not because it had any effect as a curative agent in the treatment of syphilis in any stage. His opinion of it is that *per se* it is valueless, and its use is calculated to do mischief, and deceive. He considers that it is only in those cases where mercury has been previously administered, that iodide of potassium is of any value as a therapeutic agent in syphilis.

Case 2.—*Iritis and Inflammation of the Cornea (from Paralysis of the Fifth Nerve?)—Paralysis of the Fifth and Third Nerves—Paraplegia—Loss of Memory—History of Syphilis and of an Attack of Hemiplegia One Year before—Treatment by Mercurials—Recovery.*

W. L., aged 35, unmarried, a sailor, was admitted into the Royal Free Hospital, under the care of Dr. O'Connor, on the evening of October 4, 1861. The day before his admission he was suddenly seized with loss of power over the lower limbs, loss of vision in the right eye, with severe pains in the eye-ball, as well as in the temples and over the whole of the front half of the head. The House-Surgeon, by whom he was admitted, viewing the case as one of cerebritis,

prescribed a blister to the nape of the neck, with a pill composed of two grains of calomel, one-sixth of a grain of tartarised antimony, and a quarter of a grain of opium, to be taken every six hours.

The following day the patient was seen by Dr. O'Connor, who found that, in addition to the symptoms recorded above, he was suffering from iritis, and the cornea of the right eye seemed as if about to slough, and there was great intolerance of light. The pain in the head, which was most severe on the right side, was violent and distracting. There was, in addition to the paraplegia, paralysis of the right upper extremity, and of the fifth and third pair of nerves. He had had no sleep since his admission; the bowels confined; the pulse was feeble and slow, 60 in a minute, and the general state of the circulation was, with that exception, good. There was loss of memory. The urine was retained, and when drawn off had a strong ammoniacal odour. The respiratory organs were healthy; the surface of the body was cool; and the tongue was slightly furred.

On inquiring into his history, it was learned that, nine years ago, whilst at the Cape of Good Hope, he contracted chancres, followed by buboes in both groins, which were opened. He soon after had sore throat, from all of which he said he got well. The treatment, he said, was very simple, and he believed he had never taken any preparation of mercury for the cure of the disease. On September 4, 1860, when on board a merchant ship, bound for St. Francisco, and within four days' sail of his destination, he was suddenly seized with paralysis of the right side of the body and right side of the face. He fell down and could not speak. There was a Medical man on board, a passenger, who saw him, and directed his being placed in his berth. On his arrival at St. Francisco, he went to his usual place of abode there, where he was attended by a Medical man for three months; but as he was not getting better, he became a patient at the Hospital. Six weeks after admission he felt a slight improvement. He could speak a little, and there was partial motion and sensation in the affected side and extremities. At the expiration of four months from his admission to the Hospital, he was so much improved as to be able to walk out and to speak distinctly. He then left the Hospital. He states that during the time he was in the Hospital the only medicines he had were pills, which made his mouth sore, and that blisters were repeatedly applied to the nape of his neck. At the expiration of a month from his leaving the Hospital at the Cape he left in a merchant vessel for New York. He has since been at sea, and, with the exception of feeling occasionally slight loss of power of the lower limbs, especially the right, he has been in good condition. In June last he arrived in England, and a month after, on account of obstinate constipation, was admitted a patient at a Metropolitan Hospital. He was suffering at that time from slight paralysis of the lower limbs. In three weeks, the constipation being relieved, but the partial paralysis in no way affected, he left that Hospital.

Dr. O'Connor prescribed the immediate administration of a dose of purgative medicine, and, viewing the case as one of syphilitic deposit in the brain and spinal cord, directed the continuance of the pills prescribed by the House-Surgeon.

7th.—His bowels had been well relieved, but there was no abatement in the severity of the symptoms. He had had no rest in the night. The paralysis is not less, and there is a feeling of numbness in the right hand and arm. There is severe salivation, with an intense mercurial fetor, and no appetite or desire for food. The pills to be discontinued.

8th.—He has not had any sleep since his admission, nor are the pains of the head or eye at all abated; the cornea is still inflamed, the pulse is fuller. He was now ordered five grains of the iodide of potassium, with tincture and decoction of bark, three times a-day; the diet, consisting of milk, arrow-root, and beef-tea, to be continued.

10th.—He has not had any sleep, and feels much exhausted. The pains in the head are still the same, and the eye is not improved; pulse 65. A blister to the nape of the neck, and four leeches to the right temple.

12th.—Pains of the right side of the head and eye much relieved; he had some sleep last night; the mouth is still very sore; the urine has to be drawn off, and the bowels are constipated; the medicine continued.

13th.—The salivation still continues severe; there is great prostration; pulse feeble, 65; had but little sleep in the night; to take every six hours a draught composed of nitro-hydrochloric acid with tincture and decoction of bark—a gargle of chlorinated soda to be used, and four leeches to be applied to the left temple.

Under this treatment the general health improved, and the pain in the head was much relieved.

20th.—There is no pain in the head; he sleeps better at night, and his appetite is improving; the eye is better; there is less intolerance of light; there is slight motion of the lower limbs, but no sensation; the mouth is much improved; the mixture to be continued, and a blister to be applied between the shoulders.

24th.—The mouth is now quite well, and there is no mercurial fœtor. He can move the lower limbs freely whilst in bed, but there is no reflex action on tickling the soles of the feet. The acid mixture to be omitted, and a suppository composed of fifteen grains of mercurial ointment to be used every night.

28th.—Slight reflex movements in both legs, but principally in the right. From this date he progressed favourably. There is only slight opacity of the cornea; he can see, but feels as if there was a mist before his eye; there is irregularity of the pupil; he has pain in passing water, resembling stranguary, which he attributes to the stout he is taking, instead of which he has been ordered six ounces of port wine.

November 5.—Can walk from bed to bed, and yesterday he walked the length of the ward; the gums are now again very tender; his bowels, which before were constipated, now act regularly; there is double vision from remaining paralysis of the third nerve; the pulse is small and feeble, 68; to have full diet.

6th.—He is to-day low and depressed; had no sleep last night, and was restless owing to a severe headache; his mouth is very sore; the suppositories to be discontinued; to take five grains of the iodide of potassium, with liquor potassæ and infusion of quassia, three times a-day.

18th.—The headache was relieved after the second dose of the iodide of potassium; he has gone on improving; there is a great increase of sensation in the lower limbs and the right upper extremity; when he lies down he has headache and giddiness for some time afterwards, of which he has complained for more than a week; he was ordered a blister to the nape of the neck, to be dressed with equal parts of savine and mercurial ointments.

30th.—There is a marked improvement in his condition, the headache and giddiness have entirely disappeared, and he sleeps soundly; he is now able to walk well about the ward, with the occasional use of one crutch, and it is only under occasional circumstances that he sees double, and the opacity of the cornea is scarcely noticeable; the opacity was so slight that the fundus was easily seen by the aid of the ophthalmoscope; there was no deep-seated disease.

Case 3.—*Paralysis of Both Legs and of the Right Arm, and Partial Paralysis of the Left Arm—History of Syphilis and of Lead Poisoning—Recovery under the Use of Antisyphilitic Remedies.*

H. M., aged 35, a painter by occupation, was admitted into the Royal Free Hospital, under the care of Dr. O'Connor, on October 30. His condition on admission was complete paralysis of the lower extremities and of the right upper extremity, with partial paralysis of the left. His speech was faltering, he was pale and emaciated, his pulse was full, and he slept well. He had cough, and there was loud bronchial breathing. The history he gave of himself is, that twelve months ago, while at work at a house near Grantham, one morning, when commencing work, he felt as if his arm was drawn back owing to constant spasm in the muscles from his fingers to the shoulder-joint. Soon after feeling in this way he went to some other men to assist him lest he might fall. He was taken home and went to bed. The following day he felt well, and did not seek any Medical aid, and the next day, there being no return of the symptoms, he went to work and continued at it for one month free from any uneasiness whatever. He next went to work to a gentleman's seat in Lincolnshire, where he continued well for a fortnight, at the expiration of which time he was suddenly seized with pains in both shoulders, his hands dropped, and he could not hold his brush. In this state he consulted a Medical man, who advised him to go to Matlock Bath, which he could not afford to do. For six weeks he was attended by the parish Medical officers,

and then was admitted a patient of the Stamford Infirmary, under the care of Dr. Pratt, where he remained for five weeks, but the symptoms getting worse, he was discharged as incurable. He was next sent to the Union Infirmary, on his way to which place he states that he was jolted so severely that he was "mesmerised" in some way which did him more good than anything else. Having been an inmate of the Infirmary five weeks, he got much better, and left for work, at which he continued until a month ago, when he was seized with paralysis, and gradually got into his present state. The history of the case warranted the supposition that the paralysis might be the result of lead poison, but there was no evidence afforded by the state of the gums that such was the case. He stated, however, that he had two attacks of painter's colics—one seven years ago, the second five years. These attacks were of but short duration, for as soon as his bowels were well relieved all the symptoms disappeared. He said that twelve years ago he had syphilis, chancres followed by a very bad sore throat, and eruption on the skin, for which he was attended by Dr. Pratt, of Stamford. Shortly after he had a syphilitic sore on the top of his head, and his hair fell off. Six years ago he was a patient at the Lock Hospital, London, with disease of the bones of the right forearm, when a piece of bone was removed, but the wound remained open for nearly twelve months, when it healed by remedies. Since he had had no symptoms of disease which he considered of a syphilitic character.

Dr. O'Connor, notwithstanding the trade of the patient rendering him liable to painter's colics, and the history of the early symptoms of the paralysis justifying the suspicion of lead poison, viewing the whole history of the case, supposed it to be one of syphilitic nature, and put him under mercurial treatment. He ordered a mercurial suppository to be introduced every night; to have full diet, and a pint of stout daily.

November 15.—The action of the mercury had developed itself. There was a general improvement in the man's condition. He could walk a little, and could fairly grasp anything.

21st.—The system is under the influence of the mercury. He is now able to go about freely, and to spend some time in the square of the Hospital, and he makes himself useful in the ward. The right hand alone is affected, and that but slightly. To have five grains of the iodide of potassium, with liquor potassæ and infusion of quassia three times a-day. Galvanism was applied to the hand.

30th.—He is so much better that he will leave the Hospital on Tuesday next, December 3.

KING'S COLLEGE HOSPITAL.

FIBROUS TUMOUR OVER THE PAROTID—REMOVAL—RECOVERY.

(Under the care of Mr. FERGUSSON.)

[Reported by Mr. MARSDEN.]

Elizabeth B., aged 31, married, admitted July 4, 1861. No children. Her father's mother died of cancer of the uterus, and her aunt is now suffering from cancer of the rectum. Eight years ago she began to suffer from debility, and had leucorrhœa at intervals. Five years ago she first perceived a small lump, the size of a hazel-nut, situated half an inch below the lobule of the right ear. It was then painless. It was painted with iodine, and subsequently some escharotic was applied, which converted it into an open sore, and this was allowed to heal. The tumour, which had now existed twelve months, was increased to the size of a walnut. A blister was then applied to it, which was kept open for one month, and for the three following months was poulticed. Under this treatment it increased in size rapidly, and became very painful.

July 5.—It is now the size of a hen's egg, situated close under the auricle of the right ear, and on a level with the ramus of the lower jaw, lying over the parotid. It is hard, and not painful even on moderate pressure.

6th.—*Operation.*—The patient having been placed under the influence of chloroform, a vertical incision was made over the most prominent part of the tumour, until the knife entered it; it was now squeezed out, and detached by the fingers. It was of a fibro-cartilaginous nature, with a fibrous covering.

Mr. Fergusson remarked on the advantage of using the knife as little as possible in operating about this region, on account of the danger of wounding the branches or trunk of the facial nerve, etc.; that it was advisable to operate if the tumour was moveable, but doubtful if firmly attached. The tumour in this case was situated rather deeply.

8th.—Pulse quiet. Complains of numbness in the right cheek. There is inability to close the right eyelids. The other branches of the facial appear intact.

18th.—The facial paralysis continues unimproved.

20th.—Discharged with wound nearly healed. Paralysis continues as before.

MEDULLARY TUMOUR OF CHEEK IN AN INFANT AGED THREE MONTHS.

(Under the care of Mr. FERGUSSON.)

[Reported by Mr. MARSDEN.]

Lucy E. S., aged three months, admitted August 2, 1861. Six weeks ago, a small hard lump, about the size of a pea, came on the inner side of the left cheek; this gradually increased in size, and three weeks ago a small portion of it was excised. At this time it was very hard. It continued to increase rapidly in its dimensions since it was operated upon, and subsequently presented an ulcerated surface.

August 3.—The child is well developed, rather pale. There is a tumour the size of a small apple, growing from the inner side of the left cheek. The innermost side of the tumour presents a large ulcerated surface, covered with black scales and fungous granulations.

Operation.—An incision was made horizontally through the left cheek, the upper and lower flap being held by assistants to prevent hæmorrhage. The tumour was now dissected out, and the cheek sewn up.

4th.—The child passed a restless night; is very irritable to-day.

5th.—Passed a good night. Purged this morning.

6th.—The stitches were removed to-day.

7th.—Discharged. Wound fast healing up.

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Medical Times and Gazette.

SATURDAY, DECEMBER 7.

OXFORD MEDICAL EDUCATION.

In another part of the present number we publish the Papers which were lately set at Oxford for the First Examination for the Bachelor of Medicine degree. These Papers speak for themselves, both as to the high standard and eminently practical character of the Oxford Medical Examinations. This being the first occasion on which the New Medical Statute has come into play, it will not be out of place if we

give a brief outline of the system of Medical Education at present pursued in that University.

Under the present system every candidate for the M.B. degree must have studied Medicine for at least four years from the time of passing the first school in the final examination for the B.A. degree. He must likewise pass two Medical Examinations, one at the end of the first two years of Professional study, the other at the end of the whole term of four years. Those candidates, however, who have already obtained a first or second class in the School of Natural Science, are exeused certain portions of the First Medical Examination, and have, likewise, the privilege of passing it as soon as they ehoose.

The Examinations are partly *vivâ voce*, partly on paper, and partly practical. The subjects of the first are—Human and (to a certain extent) Comparative Anatomy and Physiology, together with Mechanical Philosophy, Chemistry, and Botany, so far as they bear upon Medicine. The subjects of the second are—the Theory and Practice of Medicine (including the Diseases of Women and Children), Materia Medica, Therapeutics, Pathology, the Principles of Surgery and Midwifery, Medical Jurisprudence, and General Hygiene.

The candidate for the M.D. degree has no further examination. He merely has to wait three years from the date of his M.B., and publicly to reeite a Dissertation on some Medical subject, to be approved by the Regius Professor. The licence to practise is given with the M.B. degree, as heretofore.

Such are the main points of the New Statute. The *great* change which has been made is precisely that which has, for some time past, been adopted with such good results by the London College of Surgeons and other licensing Boards, viz. —the substitution of two examinations for one, at two different periods of the student's career; the first being concerned with those sciences which form the groundwork of Medicine, the second with Medicine itself and those studies which have a more immediate bearing upon it.

Before concluding, we will say a few words about the inducements which Oxford offers to its students to graduate in Medicine, and the extent to which it enables them to pursue their Professional studies *within its own walls*.

The branches of Professional study, which may be pursued within the University are Human and Comparative Anatomy and Physiology, Chemistry, Botany, and Mechanical Philosophy (*i.e.*, all the subjects required for the First Medical Examination). There are eminent Professors to teach, a rich Museum to illustrate, and every accommodation for praetically learning these (and other) branches of Natural Science. We would draw special attention to the fact that students are now able to practise *human* dissection at Oxford. The dissecting-rooms attached to the Anatomical Department of the new Museum are perfect in their arrangements; while those who dissect have the advantage of the constant personal supervision and assistance of the Professor of Anatomy. Some of the first-fruits of these anatomical studies at Oxford appear in the last number of the *Natural History Review*, in an elaborate paper by Mr. Church (the Lee's Reader in Anatomy), on the Myology of the Higher Apes Contrasted with that of Man.

Further, the Student who chooses to avail himself of the teaching of the Professor of Medicine in connexion with the Radcliffe Infirmary, has the opportunity of gaining some insight into the Nature and Treatment of Disease. If he make the best of this opportunity, he will undoubtedly learn a great deal. The field of observation, however, which the Infirmary affords, is at present too narrow to do away with the necessity of his resorting to the Practice of other and larger Hospitals.

Among the inducements which the University offers to a student to graduate in Medicine are: (1.) The fact that the scientific branches of his professional studies may be pursued within its own walls. The student who intends graduating in Medicine may now master all the subjects required for his First Medical Examination without forfeiting the much-prized advantages of University residence and connexion; and, when he leaves Oxford, to "walk" the great Hospitals of this or any other country, he has his undivided attention to bestow on the more strictly practical branches of Medical study.

(2.) The University offers for competition eertain prizes of more or less pecuniary value to those who take up the study of Natural Science, either for its own sake or as preliminary to the subsequent study of Medicine. Passing by various Scholarships, Studentships, and Fellowships open for competition to the Natural Science student, and attached to different Colleges, we would draw special attention to the Radcliffe Travelling Fellowships, one of which, value £200, is open for competition every year, and tenable for three years; eighteen months of this to be spent in Medical study outside the United Kingdom. Those are eligible to it who, having taken a first class in the Natural Science School, declare their intention of finally graduating in Medicine. It is obvious that a student who succeeds in obtaining one of these Fellowships will receive a sum of money sufficient, if judiciously and economically used, to defray the expenses of a first-rate Medical education.

We have dwelt at some length on the present system of Medical education at Oxford, because we believe that the great advantages there offered to those who enter with the intention of one day studying Medicine are not generally known beyond the University itself.

THE WEEK.

We are glad to find that our friends of the town party are inclined to meet us half way. We argue for an Hospital in the pure air of the country, with a small receiving establishment in town for patients affected with disease so acute, and injury so severe, as to unfit them for the shortest journey. We argue that the number of patients coming to St. Thomas's from the immediate vicinity, and those affected with diseases too severe to bear further removal, can easily be calculated, as we did the patients at St. George's; and that the majority of the patients, including those from distances, those with chronic diseases, and those requiring operations, would be infinitely benefited by the large country Hospital, whilst the acute cases from the neighbourhood would be as well treated as at present in the smaller local receiving house. Our opponents desire to have the main Hospital in Lambeth, and a small Convalescent Institution in the country, for patients suffering from lingering or incurable disease, such as phthisis, paralysis, and cancer. The fair way would be to make out a Statistical Return showing what proportion of the patients during the last ten years would have been most benefited by the intra-urban and the ex-urban schemes respectively. Rumour tells us of the coquettings of one or two other Institutions with St. Thomas's, with the hope of bringing on an alliance. It is said, for example, that the King's College people would be glad to fuse their school into that of St. Thomas's, and to have a huge Hospital built close to their own in Lincoln's-Inn Fields. But surely if the site of an Hospital is to be chosen with regard to local interests, it would not be fair to rob the poor of Southwark for the benefit of St. Clement Danes.

Some of our correspondents urge us to notice the dangerous and often fatal consequences to delicate persons of attending funerals. To set out, it is justly said, in a state of mental depression, with an imperfect breakfast, and go by studiously

slow pace to the cemetery, and then to stand bare-headed on the wettest and coldest of soils, as at Kensal Green, is an ordeal in the winter season only fitted for the most robust to encounter; or, would it not be possible, it is asked, to have the religious part of the rite at a church in town, and let the body be accompanied to the cemetery by the nearest relatives only? Or might not the attendants meet at the cemetery? Either plan would save time, expense, and danger. It is our function to point out that these dangers are real; but not to prescribe the remedy.

On Monday evening last, Mr. Martin, of Reigate, one of the oldest and most respected Practitioners of the day, invited the students and staff of St. Thomas's Hospital to a *conversazione*, at which he proposed to entertain his audience with a dissertation on "The Memorabilia of the Past." The venerable gentleman entered St. Thomas's in the year 1796. He gave a graphic picture of student life, contrasting the difficulties surmounted by the past generation with the improved teaching and facilities offered to the student of the present day. Mr. Martin illustrated the obstacles to impede the study of anatomy by the difficulty in obtaining subjects for dissection, the only supply being dependent on the resurrection-men, or body-snatchers, as they were called. At this time there existed no Medical periodical; the literature of the Profession was, in fact, at a very low ebb. Mr. Martin gave many illustrative characteristics of the eminent men of that day, presenting interesting portraits of Fordyce, Baillie, Cline, Chandler, Thornton, Saunders, Cooper, and others. Although Mr. Martin's voice was feeble, he secured the attention of his audience to an address of two hours, and the company separated with feelings of great regard for their venerable friend.

Dr. T. Herbert Barker, of Bedford, is endeavouring to persuade the "dirty party" in that town that sewage is neither nice nor wholesome as a constituent of water. He tells them—

"In Bedford there is not a pure untainted well of water within fifty yards of a cesspool. Geological reasons exist to render probable the truthfulness of this statement,—and chemical analysis abundantly proves the fact. Bedford is mostly situated upon the gravel drift. This subsoil is highly porous. The wells are shallow. Cesspools abound throughout the town. There are upwards of three thousand of them. Ergo, the mischief. The surrounding soil is soaked, and every well is more or less contaminated. I will give one of many instances of soakage and infiltration which have come under my notice. A family in the centre of the town had always drawn apparently good clear water from the kitchen pump. A stable was built in the yard. By-and-by the water became very impure—something like the water in a horse-pond. What was the reason? The well was opened and cleared. No improvement. What could be the cause of it? I suggested that the liquid from the horse-manure, which was thrown into what had formerly been an ash-pit, infiltrated into the well, although the well was situated a few yards from the dung-pit, and walled in with stone-work. Now came the *experimentum crucis*. The manure hole was roofed over, and the floor was well cemented. The well was pumped dry. The water has never since been contaminated from this source. Notice here that the inhabitants of this house had for many years drunk the infiltrations from the refuse matters of an ash-pit. It was only when the water had become so discoloured, and utterly unfit for use by admixture with the liquid drainage from stable manure, that the mischief was visible and tangible."

Dr. Barker wishes to disturb the ancient reign of cesspools, and to substitute good pipe drainage, with, we hope, the proviso, that the drainage shall be made useful in agriculture. He is supported by the members of his own Profession in the town, with one exception.

Dr. Ballard, Medical Officer of Health for Islington, has been examining the properties of adulterated butter, and furnishes, in a paper in the *Chemical News*, the following parallel account:—

Butter, newly churned and free from Salt.	*Butter Adulterated with Dripping.*
Colour.—Bright yellow—uniform.	Paler (paleness increases with the proportion of dripping)—often marbled yellow and white.
Consistence.—Firm at 54°.	Firmer (increasing with proportion of dripping).
Odour.—Strongly butyraceous.	Butyraceous odour lessened (but still present even in large amounts of adulteration).
Appearance on washing, in a glass half-a-pint beaker, one oz. with boiling water.—A melted layer occurs on the surface, consisting, as viewed at the side of the beaker, of minute drops, which, lying closely together, give a finely cellular aspect to the layer. When cool the cake is a soft solid, fluctuating on agitation of the glass, or, at any rate, yielding readily when the glass is tilted. The water below is very opaque with milkiness. The cake is yellow.	The melted layer consists of much larger drops, and the cellular appearance, therefore larger. On cooling, the cake is firmer, paler in colour, sometimes marbled, does not yield at all or much less readily to tilting of the beaker. The water below is less opaque with milkiness, (and often deposits dirt from the salt used in preparation).
On Transference to Blotting-paper.—The mass is wet, and the wet runs away slowly.	The mass is almost dry on removal from water, and the remaining water rapidly runs away into the paper.
The blotting-paper acquires a marked yellow, greasy stain, which runs extensively over it. On transferring the butter to a second fold of paper, this stain is again imparted.	The stain to first blotting-paper is less marked, and that to second also. Both are of a less deep tint.
Physical Characters of Dried Butter.—Colour, bright yellow—odour, butyraceous—breaks under pressure of the spatula at 54° into fine mealiness—taste, butyraceous, not melting on tongue so smoothly as unwashed butter, but still quickly, and with little sense of granulation.	Colour less yellow—odour, that of dripping, but more or less butyraceous (this varying with the relative proportions of the two)—has a coarsely granular appearance in mass, and on gentle pressure with a spatula at 54° breaks down into independent granules very readily, these being the size of fine pearl sago and globular in shape—taste of the dripping distinctly perceptible (in low degrees of adulteration this is less marked)—does not melt so smoothly or readily on the tongue, but for a long time a roughness remains upon it, *increasing as it melts.*
Pressure of a little heap the size of a pea firmly and quickly by a spatula between a fold of blotting-paper gives an irregular, ill-defined, greasy stain, not very marked.	The stain is a circular, well-defined, oily spot, which soon becomes surrounded by a less greasy halo. (The perfection of this stain appears to vary with the quantity of the adulterant.)

Physicians in the days of our grandmothers used to denounce butter as unwholesome; now we know it to be the most easily digestible of fats under ordinary circumstances, and believe that it is essential for the public health,—but it should be pure and abundant.

There can be no doubt that it would be better and cheaper for the public, when ill, to get advice from a Medical man

than to prescribe for themselves, or to go to a mere vendor of drugs, and ask him what is good for them. But every man desires to save expense, and it is not in every district that a Medical man is accessible who will prescribe and supply medicine off hand, at a low charge. Hence the Druggist is resorted to; and he is subjected to the temptation, not merely to recommend and sell drugs, but to give Medical advice; and if this be done rightly in his own house, why may he not do it abroad? In order to settle various questions concerning the legality of the practice of Medicine by Druggists, the Editor of the *Chemist and Druggist* has drawn up the following questions, and obtained counsel's opinion thereon, as follows :—

"QUESTIONS.

"1. Has a Chemist, etc., a right to mix up at his shop, for a patient, a medicine which the Chemist considers fit and proper for the case?

"2. May he, if sent for, attend a patient for that purpose?

"3. In either case, is he entitled to recover the value of his medicines, if he supply the same on credit?

"4. Is there is any criminal liability attaching to a chemist, etc., who, in dispensing medicine to a casual customer, commits an error through ignorance of the patient's constitution; if the disorder, which the regular Medical attendant of the patient might have alleviated, prove fatal through the want of knowledge on the part of the Chemist of previous symptoms of the particular case?"

The following opinion has been received on these points :—

"OPINION.

"1. I am of opinion that a Chemist may, in his shop, so far prescribe for a customer as to advise with him as to the nature and quality and mode of application of the medicines which he is about to sell, and also as to which of his commodities will best suit the requirements of his customer. He may listen to his customer's statements as to the reasons for his wishing to become a purchaser, and may suggest to and advise him as to which of his commodities will be most suitable and beneficial to the customer, or may dissuade him from purchasing or taking that which a customer in his ignorance may have applied for. This advice is merely incidental to the sale and dispensation of the Chemist's wares and drugs and cannot, of course, be made the subject of a charge.

"2. I should say that in no case can a Chemist attend upon a patient or customer at the house of the latter, for the purpose of giving him advice or of seeing him, so as to be able to form an opinion as to the mode in which the Chemist should prescribe for or supply his patient with medicines. Of course, a Chemist may go to his customer's house to take an order for specific goods from the customer, if the latter send for him, he being too unwell to go out, just as any other tradesman may do.

"3. In either case a Chemist may, of course, recover for goods sold by him on credit; he is no more compelled to deal for ready money only than is any other tradesman. But, in all cases, the Chemist must be simply a 'vendor of his goods,' in no way seeking to make a profit by the advice or recommendation given by him. It seems to me, upon the whole, that the system which is called 'counter-practice' is perfectly legal.

"4. I am of opinion, that a Chemist who does no more than what I have suggested he may legally do, is no more liable to criminal proceedings than is any other Practitioner. He makes no professions, does not hold himself out in a false position, and if he acts *bonâ fide* with ordinary skill and ability, not being guilty of gross negligence, he stands in about the same position as any other Medical Practitioner. I have not thought it necessary to cite any authorities; but I believe the history of all the Professions, and all the cases on the subject, are collected and referred to in 'The Attorney-General *v.* The Royal College of Physicians,' 30 Law. J., Chanc. 757. "TOMPSON CHITTY.

"2, Essex-court, Temple, November 12, 1861."

Our own opinion is, as "counter practice" supplies an acknowledged want, and is legal within certain bounds, that the only plan of diminishing it can be by competition, that is, by supplying the public with genuine Medical advice, on easy terms, for ready money. The "Self-supporting Dispensary," though liable to abuse, puts large sums into the pockets of the Medical officers, and diverts many a man from the pauperising gratuitous Dispensary. The open surgery, too, of the young struggling General Practitioner is a public benefit. We cannot help thinking that some means might be found which shall give the lower orders cheap Medical advice, without pauperising them by gifts, nor degrading the Professional man into a petty tradesman. At all events, in this country, if any legal and popular custom be mischievous, it must be supplanted by a better one. It is in vain to hope for prohibitive Acts of Parliament.

REVIEWS.

A Peculiar and Unusual Disease of the Osseous Tissue in the Horse; resembling, in many of its Characteristics, Mollities Ossium, Rachitis, Osteoporosis, and Fatty Degeneration of Bone. By G. VARNELL, M.R.C.V.S., Assistant Professor, Royal Veterinary College, London. 1861.

IT were well if we, as chiefly interested in human pathology, were to study more often than we do the records of disease as seen in animals; and especially such carefully recorded and interesting details as those given us in this pamphlet by Professor Varnell. Physiology has long recognised that the basis of its science should include a knowledge of the structure and function, not only of animals below man, but also a knowledge of the entire vegetable kingdom. But we, as human pathologists, are far behind in this respect. The diseases of the lower animals rarely form any part in our study now-a-days; while they were relatively much more studied in the days of Hunter. The diseases of plants, too, are almost entirely neglected. We would gladly, therefore, see the field of observation extended in these directions; and with that view, we hope often to notice similar contributions to the science of Pathology and Morbid Anatomy, as the history before us, emanating from the eminent Professors of the Veterinary College.

Three horses had already died of the disease described by Professor Varnell; a fourth was not expected to live many days, and two others were labouring under the disease in a less acute form, at the time when Mr. Varnell's attention was called to the subject by a veterinary practitioner at Theale, in Berkshire. The horses were the property of Mr. Champion, of Calcot, near Reading, who is a large farmer and miller.

With regard to the history of the disease, the earliest phenomena observed were defective action in one joint or limb only, with the evidence of very acute pain on walking, as well as tenderness on examination and inordinate heat; and in a few days the part would be obviously enlarged. In about a week, another limb would become affected in the same way, when the acute symptoms connected with the part first affected would have partially passed away. All the four extremities in this way became eventually diseased. The appetite was generally good, and for a time the animals did not lose flesh very fast; but, after a while, great constitutional disturbance being set up, they fell off in their appetites and began to waste rapidly. The pulse seldom rose much above the natural standard, and the excretions appeared to be natural. The progress of the disease was one of gradually increasing intensity, wearing out the vital powers and ending in death. These early local phenomena connected with the limbs were found on dissection to be associated with extensive ulcerations of the articular cartilages, and with only a small quantity of synovia, of a dark colour, apparently from an admixture with blood. The horses seen alive were five and four years of age respectively. Besides these symptoms, a decidedly rigid state of the loins was observed when the horse was turned round or moved in a backward direction, and by pressure upon any part of the back considerable pain was evinced. The head of the horses exhibited an enlarged and roundish appearance of the facial region; each ramus of the lower jaw, the upper maxillary and the nasal bones being evidently enlarged, and pressure on them caused considerable evidence of pain. The mucous membrane of the mouth was of a purplish tint, except at the margin of the gums, where it was of a pinkish colour, covered here and there by bluish lines (veins). The lining

membrane of the nasal passages, and also the conjunctival membrane, were paler than natural. While the pulse rose only a little above the natural standard when the animals were at rest, it became increased by about ten beats in the minute if the horses were made to walk for a short distance. After the disease had progressed for about five or six months, although a desire to eat was expressed, yet only sloppy food could be taken in consequence of the diseased state of the maxillary bones: and ultimately in one instance these bones became so large that the horse could scarcely move his tongue. As the disease advanced, the joints of the affected limbs also became much larger, the heat and tenderness increased, and when the animal laid down, he could not rise again without help. In another horse, after the disease had progressed for about seven months, an attempt to walk caused the fore legs to give way at the elbow-joint on one side and the shoulder-joint on the other, in consequence (as was found on dissection) of the articular and capsular ligaments, and the tendons of those muscles which are attached near these joints becoming detached from their bony connexions by the tearing away of portions of the diseased bones.

One of the horses had been ill about six months; and another which was carefully dissected by Professor Varnell, had died after about five months' illness; and in this horse the disease seems to have been more intense than in the others. He appeared to suffer extreme pain when in a standing position.

With regard to the morbid anatomy, it had been observed that the bones of the horses already dead "were as soft as a pear;" and, that "they boiled all to pieces." "They were so soft that a rib could be cut easily with a knife, or broken like a rotten stick." With the exception of a peculiar pallidness the abdominal and thoracic viscera showed no marks of disease. The soft parts, generally, were paler than is natural, especially the muscles of those limbs which had been thrown out of use from the pain produced whenever any movement was attempted to be made. The fat generally had a mottled, watery appearance, which is very common in animals that are rapidly losing flesh. The articular cartilage of most of the joints was of a dark slate colour, much thinner than natural, and in many places entirely lost. This was especially the case round the margins of the articulations, leaving the bone at that part quite exposed. The synovial membrane was considerably thickened, especially in those parts where it is most vascular.

The quantity of synovia in each joint was small, of a dark colour, and in some cases mixed with clots of blood. In other articulating surfaces the cartilage was pale, or of a yellow tint, velvety to the feel and evidently containing fat. The ends of the bones were so much softened that by applying a slight degree of force to the capsular or articular ligaments small portions of bone could easily be detached. The periosteal covering of all the flat and irregular bones, and also over some of the long ones, was very vascular and could easily be stripped off. The bones generally were likewise so very soft that they could be cut with a knife in any direction with the greatest ease; and if pressure were applied to the cut surfaces, or where the periosteum had been removed, blood would ooze from numerous points. The cancelli of the ribs, the vertebræ, and indeed all the bones, were filled with a red gelatinous material throughout; only the shafts of the long bones were not visibly increased in size, nor was the shell or compact structure much altered. The ends of these bones, however, were enlarged and soft; and on making a section through them in their long diameter, the medullary canal (and especially the cancelli near to their extremities) was of a dark red colour, from congestion and effusion of blood into the areolar spaces. Some were filled with a peculiar fat which gave them a pale colour; and the ends of the bones thus affected had the articular cartilages of a pale yellow colour, velvety to the feel, and slightly greasy. The teeth also were affected, the *crusta petrosa* being thicker and more spongy than natural.

The bones were examined microscopically by Professors Sharpey and Harley, and presented two well-marked varieties of morbid change,—one most characteristically seen in the bones of the head, the other in the long bones of the extremities. The disease seemed most advanced in the lower jaw. It was hypertrophied in its transverse diameter, the periosteum was easily detached, the osseous tissue was of a pink colour, and pressure caused the blood to ooze from its surface as if from a sponge. The microscope showed the osseous tissue expanded into a network of fine fibres. The Haversian canals had become greatly enlarged. The canaliculi proceeding from the lacunæ were in many cases obliterated; nor were the lacunæ so distinct as in healthy bone. The enlarged Haversian spaces were filled with gelatinous matter, mingled with a small portion of fat and here and there pervaded with fine and scarcely visible fibres. In the long bones an enlargement of the medullary canals had taken place at the expense of the osseous tissue, so that the shafts of the bones were greatly thinned. The enlargement of the medullary cavity was greatest towards the extreme ends, and there the marrow was deeply tinged with blood, and the osseous tissue was hard and dense. After the calcareous matter had been removed by acid, the section of the soft residue had a glistening cartilaginous appearance, dotted here and there with opaque white spots, which were found to be irregular-shaped cavities in the osseous tissue filled with fat cells. These cavities varied in size from a pin's point to a millet seed, and seemed to have commenced for the most part in the lacunæ, or in the Haversian canals, the walls of which seemed to have gradually broken down, or to have been removed as the morbid condition advanced. The place of the earthy and animal matter was gradually taken up by fat corpuscles.

The bones, after being macerated and dried, showed many peculiarities not apparent in their fresh state; for example, the ulceration of the cartilage was seen to have affected the bone beneath, the loss of tissue extending more or less deeply into the bone, the size of the cavity increasing with its depth. These appearances show that the loss of the cartilage was due to the morbid condition of the bone. Scarcely a joint in the body was free from this apparently "worm-eaten" condition of the bone and cartilage.

A disease with morbid phenomena and lesions, very similar to this, is well known in the United States of America, under the name of "Big-head;" and Mr. Varnell called attention to this in 1845. Some are inclined to attribute the disease in America to the horses eating too much Indian corn (maize). The disease seems to be rare in England; but, in 1849, Mr. Shave, a Veterinary Surgeon at Chelmsford, in Essex, recorded, in the *Transactions* of the Veterinary Medical Association, an instance of a similar disease. In this case the horse was fed largely upon bran. In the cases described by Professor Varnell lime was not abundant in the locality where the horses lived, and the water drank by the horses was very soft, partly rain water. From the time of weaning up to the time of their being taken ill, the horses were fed upon grass, hay, pollard, and a little oat-meal at first, and with roots of different kinds when the grass was finished. In the second year the horses were turned out to grass and wintered as before. The third year they were taken into the stable and fed on hay, pollard, and roots; and in the succeeding summer they had green food, such as rye, grass, and vetches.

Two of the horses were taken ill at four years old, one at five years old, one at six, and the other at three. The disease was thought not to affect the mares; but we are informed that one of the mares on the farm has lately shown symptoms analogous to those exhibited by the horses. Hitherto the mares had been pregnant, and their food was in some measure different, especially as to the supply of roots up to Christmas. After this they had pollard if in a low condition; but, as a rule, only hay until they foaled, when they had hay, pollard, and a few roots, and as soon as the grass was ready, they were turned out until September.

All the horses had been bred on the farm except one. They were the offspring of different mares and by different sires. They were fed with the same kind of food as the other horses on the farm, the feeding being similar to what had been used for many years, and the water was that of which the farm stock generally partook. On the other neighbouring farm no instance of the disease had occurred.

Generally, it may be said that, considering the animals were young and growing, their food seemed to be rich in phosphates and probably deficient in lime; but more information is required on this point; and seeing that the disease was so distinctly isolated, some more insight may yet be got regarding its pathology. At present the evidence seems to point to the disease either as one of constitutional developement or of dietetic origin; perhaps it may be found that both agents have been instrumental in bringing about the lesions.

The original organization of the animals may have been faulty, and the food which nourished the healthy horses on the farm may have been unsuited for those animals in consequence of a pre-existing unhealthy state of the system. We hope to hear more from Professor Varnell concerning this interesting disease.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

REPORT ON THE ALLEGED DANGERS FROM INHALATION OF SULPHURIC ETHER.

An elaborate Report on this subject has been recently made by a committee of the Boston Society of Medical Improvement; in which, as might have been anticipated from the opinions which have always been predominant in Boston, the employment of sulphuric ether is unreservedly recommended, and that of chloroform as unreservedly denounced. The following are the conclusions:—1. The ultimate effects of all anæsthetics show that they are depressing agents. This is indicated both by their symptoms and by the results of experiments. No anæsthetic should, therefore, be used carelessly, nor can it be administered without risk by any incompetent person. 2. It is now widely conceded, both in this country and in Europe (?), that sulphuric ether is safer than any other anæsthetic, and this conviction is gradually gaining ground. 3. Proper precautions being taken, sulphuric ether will produce entire insensibility in all cases; and no anæsthetic requires so few precautions in its use. 4. There is no recorded case of deaths known to the Committee attributed to the use of ether, which cannot be explained on some other ground equally plausible; or in which, if it were possible to repeat the experiment, insensibility could not have been produced and death avoided. This cannot be said of chloroform. 5. In view of all these facts, the use of ether in armies, to the extent to which its bulk will permit, ought to be obligatory, at least in a moral point of view. 6. The advantages of chloroform are simply those of convenience. Its dangers are not averted by its admixture with ether in any proportion. The combination of these two agents cannot be too strongly denounced as a treacherous and dangerous compound. Chloric ether, being also a solution of chloroform in alcohol, merits the same condemnation.

Dr. C. T. Jackson, one of the Committee, objects to the resolution condemning the mixture of ether and chloroform. He believes that a mixture of four measures of ether and one of chloroform may be employed without danger, or with very little danger, and that the risks of chloroform are diminished more than four-fifths by this combination.—*Boston Medical and Surgical Journal*, Vol. lxv., p. 241.

[No one can read the Report upon which the above conclusions are founded, without being struck with its partizanship. "Ether and nothing but ether" has evidently become a Bostonian maxim which must be maintained at all hazards. We were not aware of the increasing conviction in its favour which the Reporters tell us is spreading in Europe. Fortunately, as an antidote to the exclusiveness of their conclusions, they have appended abstracts of the forty or fifty alleged deaths from the employment of ether; and certainly no one can peruse these without feeling convinced that in several of them the charge is substantiated. These may be few; but when we consider the fact that the use of ether is well-nigh abandoned, while chloroform is annually employed in thousands on thousands of cases throughout entire Europe, the disproportion of resulting accidents is not so great; and in neither case is it greater than appertains to any other powerful article of the Materia Medica.]

INHALATION OF ETHER IN PUERPERAL CONVULSIONS.

At the Boston Society for Medical Improvement Dr. Storer related a case of puerperal convulsions in which the inhalation of ether, after bleeding had failed to arrest the convulsions, kept them under control by being administered upon their slightest appearance, until a few hours had elapsed, when, labour coming on, the woman was delivered of a dead child, and recovered. Dr. Storer did not believe that he had ever given ether under these circumstances without beneficial effect. He had, during the past year, seen six or eight cases, in all of which he thought it had done good. He did not mean to say that it was infallible, but that it had been of great service in his experience. In one of the most remarkable cases, the patient had had a convulsion every hour for ten or twelve hours. Ether was then given, after which one slight paroxysm only occurred. The urine was excessively albuminous.

Dr. Bigelow remarked that these convulsions might be divided into different classes, particularly the hysterical and epileptiform; and it is fair to conclude that the different forms require different treatment. He thought that the diagnosis was more important than the treatment. When convulsions tend to or terminate in coma, it is in vain to expect good from ether. In the hysterical variety, ether might prove a palliative, though the patients would generally recover after labour without any treatment. Within the last year he had seen two cases: in one the spasms were violent, but there was no other unfavourable symptom. The membranes were ruptured, and in a short time dilatation came on; the woman was delivered, and both mother and child did well. In the other case the woman was absolutely comatose, and died. In the first case, ether would have acted as a palliative, in the other it would have been of no avail. Dr. Storer had seen very decided effects from ether in cases wherein the urine contained large quantities of albumen, and in which there was no evidence of hysteria. Dr. Ware had tried ether but once in puerperal convulsions, and in that case it had not the slightest effect in arresting the convulsions, which went on until delivery, and the woman died. Dr. Cabot thought that the danger from convulsions was in some degree dependent upon the rapidity with which they occurred, and just as the poisonous effects of strychnia are controlled in a measure by keeping the patient perfectly still, so we might expect ether to be of service in puerperal convulsions by arresting the paroxysms, or diminishing their frequency. Dr. Tyler said, that he did not recollect a single case in which he had administered ether for the convulsions of epilepsy, general paralysis, or hysteria, where he did not feel sure that it had acted as a perfect palliative. In answer to a question as to whether it would be safe to employ it in cases of organic diseases of the brain, he replied that he had often given it in such, and had never observed any evil results. Dr. H. Bigelow believed that the ether acted favourably in puerperal convulsions, by quieting the exhausting action of the muscles. Dr. Palmer said that he had relied on ether alone in three cases. They all recovered, and the coma seemed more quickly relieved, and the convalescence was more rapid than usual. The ether did not seem to have any marked effect in controlling the convulsions. Dr. Dalton stated that his experience was decidedly in favour of the efficacy of the inhalation of ether in puerperal convulsions.—*Boston Medical Journal*, vol. lxv., p. 119.

EXCERPTA MINORA.

A Modification of the Rhinoplastic Operation.—The operation for a new nose which some twenty years ago made so much noise, has for some time been abandoned in Paris. Artificial noses formed merely from the soft parts, M. Velpeau observed on introducing to the Academy a new operation by M. Ollier, have furnished but unsatisfactory results. The transplanted skin after a short time becomes wrinkled and misshaped, so that the unfortunate patient derives little benefit from what he has undergone. M. Ollier proposes to meet the inconvenience by keeping up the flap by means of an osseous support, which may be obtained in two manners. By the one, the periosteum is detached from the frontal bone at the same time that the portion of skin necessary for the formation of the nose is obtained. This portion of periosteum will produce a plate of bone which will suffice to prevent the consecutive sinking in of the soft parts. Or the bones of the nose may be replaced by fragments of bone taken from the face, *e. g.* the ascending apophysis of the maxillary. A patient was presented to the Academy whose nose had been restored by one of these processes, three months since, with satisfactory results.—*Union Médicale*, No. 137.

Veratrine in Painful Menstruation.—The severe pains sometimes attendant upon the expulsion of the menstrual coagula may often be relieved by large doses of castor; and M.

Vannaire strongly recommends in this mechanical form of dysmenorrhœa, an ointment containing one-hundredth part of its weight of veratrine, fifteen from thirty grains of which are lightly rubbed into the hypogastric region twice a-day. Four or five applications have always sufficed.—*Revue Médicale*, October, p. 498.

Case of Blepharospasmus Idiopathicus. — Professor Arlt relates a case of this affection, of which he has only met with six other cases. This man, aged 36, the youngest of all the cases, for about a year past had been unable to keep his eyes open beyond a few minutes at a time, owing to strong spasmodic action, which affected the *orbicularis palpebrarum* and the *corrugator superciliorum*, the other muscles of the face being unaffected. The spasmodic contractions came on without cause, and could not be prevented by any means, not even holding the lids open by the fingers. When at the Clinic they were forcibly opened, they remained so only for half or a whole hour; and the same result was produced by strong and somewhat painful pressure on the supra-orbital nerve. No disturbance of sensibility in the distribution of the fifth pair existed, while all parts of the eye were in a normal condition. Dr. Arlt intends eventually to divide the supra-orbital nerve. He refers to five cases in which this operation had failed, and to one of Graefe's in which it had succeeded. —*Wien Wochenblatt*, No. 25.

Dislocation of the Crystalline Lens.—A gardener, aged 30, came under Dr. Arlt's care, being in good health, and having had nothing the matter with his eyes, except being slightly short-sighted. On March 1, 1860, after stooping at his work, he was seized with a confusion of vision, and on admission into the Klinik the lens of the left eye was found to have fallen into the anterior chamber, having its inner edge placed against the cornea. The lens of the right eye was simply luxated inwards. The patient was kept for a long time on his back, cold applications and solution of atropine being applied externally. As, however, no change in the position of the lens occurred, and ulceration of the cornea was to be feared, Professor Arlt determined to divide this last by valvular section. The pale-yellowish, transparent lens, enclosed in its uninjured capsule, passed out without a trace of the vitreous humour. The wound healed readily, and three weeks after the operation the man was discharged, seeing well by the aid of convex glasses.—*Wien Wochenblatt*, No. 25.

Action of Morphia on the Urinary Organs.—In confirmation of Dr. Woodward's observations, Dr. Wilson, of Port Huron, states that he has for some years past found small doses of morphia to be one of the most reliable of diuretics. It does not, however, increase the solid constituents of the urine except incidentally. When given in large doses, or in moderate doses frequently repeated (*e.g.* $\frac{1}{3}$ gr. of morph. acet. every two hours), it produces a spastic contraction of the sphincter of the neck of the bladder, especially in patients unaccustomed to its use, rendering the evacuation of urine difficult. During the diuretic action of morphia, the tolerance of the bladder is much diminished, the patient having to pass water much oftener. Dr. Wilson does not, like Dr. Woodward, attribute the diuretic action of the morphia to its sedative effect, relaxing tension; but, on the contrary, he regards this as an effect of the irritation it causes while being excreted by the kidneys. When spastic contraction of the sphincter is produced by the irritation caused by the morphia, this is best remedied by one or two full doses of sweet spirits of nitre, which is not of the utility usually supposed as a diuretic, but a valuable means in assisting the evacuation of the bladder, and in allaying vesical irritability. It acts rather as an antispasmodic than as a diuretic.—*Boston Journal*, Vol. lxv. p. 211.

Professor Riberi.—Professor Riberi, whose death we announced in our last, is reported to have amassed an enormous fortune. He was sixty-nine years of age, and, after accompanying the late Charles Albert to Oporto, was appointed Physician to the present King. His social position and scientific reputation were very high; but his opponents accused him, probably not without reason, of exerting a mischievous influence by reason of his excessive attachment to the now exploded doctrines of Broussais.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

GERMANY.

Wurzburg, October 5.

THE STUDY OF MEDICINE IN BAVARIA.

As a sequel to the Students' Number of the *Medical Times and Gazette*, some information concerning the rules for the study of Medicine as they are in this country may be of some interest to your readers. These rules, without fulfilling which no one can receive the licence to practise, have been in force for the last eighteen months, and are essentially different from those existing in other German States. While in the latter the system of centralisation has been abolished, the Bavarian Government has thought fit to superintend all the examinations in our three Universities, viz., Munich, Würzburg, and Erlangen, by the ministry of the State, in order to thus render the examinations as uniform as possible.

The following are the preliminary conditions which must be fulfilled by all who desire admittance to the Practice of Medicine in its whole extent:—The examination at the gymnasium having been passed, the student, after a twelve months' study in the University, is examined in Natural Philosophy; after four years' study he is examined in Medicine by the Faculty, and after another year's practical instruction the last, or State, examination follows. Only those who procure the first or second "note" in this final examination, are allowed to compete for medico-legal and sanitary appointments.

The first examination in Natural Philosophy (Physics, General and Analytical Chemistry, especial regard being paid to organic compounds, Botany, Mineralogy, and Zoology) is held at one of the three Universities twice a-year, for three consecutive weeks, before the closing of the session, and by a specially appointed Board of Examiners. This consists of a president and four assessors; which latter are chosen by the ministry from the Professors of the University; the president, however, is appointed by the king, and retains his appointment for three years. No one is admitted to this examination who cannot bring a testimonial of having passed a previous examination in classics, and one year's study at a University, or two years' study at a lyceum.

The questions to be addressed to the students are proposed by the Board of Examiners. Each examiner writes down a certain number of questions, which are then submitted to the Ministry, which, after revising them, communicates them to the President of the Board. The questions for each department are separately written on slips of paper and numbered, and numbers corresponding to these are placed in an urn. Each candidate then draws one number for every science in which he is examined, andhas to speak for a quarter of an hour on the subject which has fallen to his lot.

The result of the examination is expressed by one of three "notes" 1 means "distinguished," 2 means "capable," and 3 "incapable." Each examiner gives a note; these notes are afterwards added to one another, and divided by five; the numbers 1 to $1\frac{2}{5}$ giving as the result of the whole "distinguished;" $1\frac{3}{5}$ to $2\frac{2}{5}$ "capable," and $2\frac{3}{5}$ to 3 "incapable.

If the candidate is declared wholly incapable, he is plucked for six months and must then again undergo the whole examination, while this note in one or even several departments does not necessarily imply his rejection. Only one repetition of this examination is allowed, and all students who are plucked at the first examination, lose the claim to a partial or total remission of the fees for the lectures, and the enjoyment of public stipends.

The examination by the Medical Faculty embraces all the departments of Medical science, Surgery, and Midwifery, Medical jurisprudence and psychiatrics being alone excepted. This examination is held every six months at each of the Universities by a permanent board of six assessors and one president, chosen from the Professors of the University. The preliminary conditions for being admitted to this examination are, first, the certificate of having passed the examination in natural philosophy; and secondly, the proof that the candidate has after that studied Medicine for four years;

and thirdly, the proof that the candidate has during the first two years of study attended at least eight philosophical lectures, and during the last three and a-half years of Medical study has in every session been present at at least one lecture by an ordinary Professor. The examination is then not only theoretical, but also practical. The latter precedes the theoretical, and embraces Anatomy, Medicine, Surgery, and Midwifery. In Anatomy the Student has to open one of the three principal cavities of the human body, and to describe the form, situation, and connexion of the parts contained therein, as well as any morbid changes which may have taken place during life. Besides this, he has to make a preparation of vessels and nerves; and finally, some part of the human body is given him, which he must describe, the subjects of examination being determined by lottery. The candidate has also to treat clinically during eight days at least two patients suffering from internal diseases, and has to make the history of the cases during that time. He must also treat clinically two Surgical patients, perform two of the more important Surgical operations, one ophthalmic operation, and apply two bandages. In Midwifery he has to assist at two labours, and to write the history of the cases before, during, and after parturition, to examine two pregnant women, and to make two diagnoses and operations on the phantom. After this has been passed, a theoretical verbal examination is held in microscopic and special Anatomy in its application to practical Medicine and Surgery, Physiology, Materia Medica, and Pharmaceutics; general Pathology and Pathological Anatomy; general Therapeutics and history of Medicine; special Pathology and Therapeutics, Surgery and Midwifery. The time allowed to each of these subjects is 11 to 15 minutes. The putting of questions and the comparation of the results is done in the same manner as described above, with the exception only that after the several notes have been added to one another the whole is divided by 8. The numbers 1 to $1\frac{3}{8}$ give the first, $1\frac{6}{8}$ to $2\frac{3}{8}$ the second, and $2\frac{4}{8}$ to 3 the third note. If the result is the third note, the oral examination has to be repeated, and if the candidate is plucked twice he can no longer be admitted to examination.

A year is then allowed to elapse during which the candidate, may acquire such practical Medical knowledge as is offered; they have to attend the lectures on Medical jurisprudence, Medical police, and Veterinary Surgery, and the cliniques of the University as dressers, and they are also expected to study specialties, such as the diseases of children, ophthalmic Surgery, syphilis, etc. The candidate may during this year be assistant to an Hospital or lunatic asylum, or pupil to Medical jurists or Practitioners.

The last ordeal is the State Examination which is held in the capital once a-year. Verbal and written questions taken from special pathology and therapeutics, Surgery, midwifery, Medical jurisprudence and police, psychiatrics, and veterinary surgery have to be answered.

The Board of Examiners consists of six assessors under the presidium of a high Medical functionary, who superintends the examination, but does not himself examine. One half of the members is taken from the Medical officers and Practitioners, the other half from the respective ordinary Professors of the three Universities in the kingdom. The president is chosen by the king, the assessors by the Ministry of the Interior once a-year. The questions for the final oral examinations are proposed by the three Universities; they are fixed, and the examination takes place as above, viz., by lottery. Every examiner gives the candidate one of four notes, of which the first means distinguished; the second, very good; the third, sufficient; and the fourth, insufficient. The notes are afterwards added to one another and divided by 6; the numbers 1 to $1\frac{2}{6}$ give the first, $1\frac{3}{6}$ to $2\frac{2}{6}$ the second, $2\frac{3}{6}$ to $3\frac{2}{6}$ the third, and $3\frac{3}{6}$ to 4 the fourth note.

The last note implies rejection for one year and repetition of the whole examination; if the candidate is plucked twice, he is altogether rejected.

The examination by writing is held under the superintendence of one member of the board, and with closed doors; it lasts for three days, four hours being devoted to each science and the use of books, written or printed, as well as any communication between the several candidates being strictly forbidden. Every paper receives one of the four notes, these are added, and divided by six as above.

After the State Examination is concluded, all the notes which have been given to each successful candidate, in both examinations, are added together and divided by twelve. The quotient then forms the chief note of the State Examination, 1 to $1\frac{5}{12}$ represents the first, $1\frac{6}{12}$ to $2\frac{5}{12}$ the second, $2\frac{6}{12}$ to $3\frac{4}{12}$ the third class.

The licence to practise, and the appointments in Medical police and jurisprudence are also influenced by the degree of M.D., for which the candidates after having passed the last mentioned examination, have to apply to that Medical Faculty at which they passed the second examination. The Faculty is then obliged by force of the candidate having passed all the examinations, to grant him the degree, provided he furnishes a dissertation on some Medical subject, which is approved of by them. This degree is given free of all charge.

Every candidate of Medicine, who receives the first note, has the right to practise in any large town, if he expresses his desire to do so, to the local authorities. He is also chiefly considered in applications for stipends for scientific journeys, for the licence to practise in smaller towns and villages, for the *venia legendi* at a University, and other appointments. These regulations will, no doubt, go far to increase the value of the degrees given by our Universities.

Speyer, October 25.

THE LAST CONGRESS OF GERMAN NATURALISTS AND PHYSICIANS.

The merit of having founded the Annual Migratory Congresses of German Naturalists and Physicians belongs to the late Professor Oken. The advancement of science was not originally intended to be the point of gravity of these meetings; but their object was rather, to bring together fellow-labourers in the field of science, who were separated by long distances, and only known to each other by reputation; to promote a friendly feeling between men of the same pursuits, and to smooth away personal differences which often turn up in scientific controversies. The Congress has preserved this character, by which it is distinguished from similar institutions in other countries, up to the present time; great cordiality prevails at the meetings, and there is no strict adhesion to the rules of etiquette. There are neither statutes nor pre-determined programmes of discussion, from which no deviation is allowed; but every one may bring before the Congress his own views on such subjects as have occupied his attention. In this manner the transactions become very varied, and the Congress may justly be called the House of Commons of the Medical Profession in Germany. Meetings like these can never be useless for the advancement of science. They have greatly contributed to promote a feeling of union, which should connect all men of the same profession, however they may be parted by country and persuasion, and whose object should be the same, although it is sought by different roads. If questions of great interest are brought before the Congress, many members, on returning home, apply themselves to working them out. There are problems in Medicine, which cannot be solved by any one single-handed, however he may be favoured by genius and circumstances, but which if treated in different ways and by many men, according to a plan devised in common, may rapidly approach their solution; and on such subjects a better understanding is often brought about by a short conversation, than by a prolonged correspondence. Even fiery controversies have their charm; the German philosopher Hegel said:—"There is nothing so fine as when minds clash together." The busy Practitioner also derives important advantages from such meetings; he often finds it impossible, under the pressure of his practical engagements, to keep himself *au courant* with new discoveries; but if he takes part in the Congress, he may, during a week's holiday, combine the *utile cum dulci*, recreation with an increase of knowledge. It has also often happened, that men of genius and of earnest purpose were kept down by unfavourable circumstances, or by intrigue and envy; in Congress they have become known, have made influential friends, and by their means obtained Chairs at one or another of the numerous German Universities, where they could devote their time to scientific pursuits. If, however, a proof were still wanting that such meetings are really a boon to the Profession, it is the circumstance that they become more frequented and show stronger signs of vitality every year.

Speyer, which had been elected as seat of this year's Congress, is a small town in the Palatinate, with only a little above 10,000 inhabitants, without scientific institutions of

any importance, and with imperfectly developed means of intercourse; but it is rich in historical recollections, and appeared, by its situation on the left bank of the Rhine, to which the covetous eyes of France are now more than ever directed, especially fitted to become the scene of this meeting, which as it were represented a scientific union of our country, which can never be destroyed by any political revolutions. Previous to the assembling of the Congress, the choice of this place was very unfavourably commented upon, and it was feared that the meeting might assume the character of a political demonstration, but this quicksand was avoided with great judgment.

In the second week of September the town began to present a very gay appearance. Every house was decorated; Bavarian flags and the German tricolour waved from the windows and roofs; and the streets and ornamental wells were hung with festoons and garlands. For the time of the meeting, additional means of travelling were provided by the railway directors; and the whole line of the Palatinate was placed at the disposal of the Naturalists and Physicians, free of charge. The inhabitants of this city and of the neighbouring towns and villages, had hospitably opened their houses for the expected guests; and the entire population of the county endeavoured to promote the success of the assembly, as if fully sensible of the importance of Natural Science and Medicine for the life and welfare of the nation. The community of feeling evinced was a source of pleasurable surprise to all visitors, especially to those from abroad.

On Monday, September 16, members from all parts of Germany and other countries began to arrive. The Secretaries of the managing committee were assembled in a large ward of the Town Hospital, where all the members had to leave their names, and could receive information about accommodation, etc. This room was thronged throughout the day, and in spite of the admirable management, the business there was not finished till dusk, as fresh visitors poured in every moment, and many most celebrated names were taken down at the desk of the Secretaries. In the evening all repaired to the large saloon of the "Wittelsbacher Hof," where several hundreds of colleagues were soon busy in animated conversation over innumerable bottles of Rhine-wine. Music was, of course, not wanting. The first Secretary, Dr. Heine, a very amiable and highly interesting man, greeted the guests in the name of the town and of the whole county. Amongst those present I noticed the Anatomists and Physiologists Gerlach, Fick, Siebold, Schiff, Czermak, Vierort, Pettenkofer, Bischoff, Weber, Luschka, H. Müller, Helmholtz, and others; the Zoologists, Leuckart, Gegenbaur, Van Beneden, Pagenstecher, Leydig; the Chemists and Physicists Liebig, Wöhler, Bunsen, Schönbein, Fresenius, Eisenlohr, Knoblauch, Wanklyn (of Edinburgh); the Astronomer Argelander; the Geologists and Mineralogists Noeggerath, Blum, Günther; the Botanists Martin, Neubert, Wigand; the Physicians Virchow, Friedreich, Kussmaul, Pfeufer, Lewin; the Surgens Bardeleben, Baum, Simon, Gurlt, Roser, Textor, Demme; the Gynæcologists Spiegelberg, Hecker; the Psychiatric Physicians Eulenburg, Erlenmeyer, Hagen, Flemming. The Ophthalmologists have of late formed a special sect in Medicine, and keep rather aloof from general meetings: they held this year a Congress of their own at Heidelberg; and at this assembly only Ruete and Pagenstecher were present, while Von Graefe, Arlt, and other heroes of modern Ophthalmic Surgery, were conspicuous by their absence.

On Tuesday, September 17, the first general meeting took place in the Protestant Church, which had been decorated in a tasteful style. From 600 to 700 members filled the large nave, while the galleries had been opened to the public, and were crowded with spectators, amongst which gaily-dressed ladies predominated. The Burgomaster first addressed the meeting in the name of the town; and Dr. Heine, the President, then delivered an oration on the Natural and Social Relations of the Palatinate; and which, although the result of very learned investigations, was clothed in a very agreeable garb. A brochure, treating on the aboriginal inhabitants of the Palatinate, and the composition of its present population, by the same gentleman, was afterwards distributed amongst the audience. In this brochure it is proved that the Palatinate is the cradle of the great German national poem: the Nibelungenlied. After this, a half-crazy speech was made by M. Ringseis, a notorious Ultra-montane, on the Dynamic "Ineinander" (mutual reaction of things); and the assembly, after glancing for a minute or two at the speaker for curiosity's sake, dispersed in haste. The several sections then met, chose Presidents, and fixed the programme for the next day; after which a sumptuous banquet took place.

On Wednesday, September 18, the sittings of the several sections commenced, which also took up the mornings of all the following days; while the afternoons and evenings were devoted to social gatherings, balls, concerts, excursions, and other festivities, in the arrangement of which good taste was observable throughout. Large numbers visited the fine old Cathedral of this town, and the large Photometer, which is exhibited in a public garden, and constitutes one of the chief attractions of this place.

Space does not allow me to describe in detail the transactions of all the sections of the Congress; and I shall therefore merely mention the communications which were made to the Medical sections. In that for Anatomy and Physiology, two papers by M. Schiff were read, and accompanied by vivisections, which went to prove that the prelum abdominale alone is insufficient to bring about vomiting; but that a dilatation of the cardia must first take place; vomiting is, therefore, not possible, if the cardia has been paralysed by contusions, etc. Besides this, M. Schiff made some remarks on the theory of the inhibitory nerves, special stress being laid on the action of the laryngeal nerve. A feeble excitation of this accelerates respiration, which is stopped by strong irritation. The same is observed if branches of the trigeminal nerve are excited, and it is therefore evident that certain physiological phenomena are induced, if nerves become exhausted, but that a specific inhibitory influence is not possessed by any one of them. M. Ruete communicated his views on certain points connected with the physiology of vision. He spoke on the eyes of insects and their mechanism, and showed that every ocellus does not perceive one point of an object only; but the whole of it. He also demonstrated a very ingenious apparatus for proving that the percipient points of the retinæ of both eyes are not identical,—a subject which at present prominently engages the attention of many of the German physiologists and oculists. M. Brueh spoke on the anatomical peculiarities of the vertebral column of the batrachians. Professor Czermak made a communication on the manner in which the closing of the larynx is effected, and demonstrated this on his own person by the aid of the laryngoscope. Your correspondent was not present at the other sittings of this section, and cannot therefore furnish an account of its proceedings, a report of them having not yet been published.

In the Physico-Chemical Section, Professor Schönbein spoke on Ozone and Nitrification. Nitrides may be traced, even if only present in very small quantities, by the blue colour, which appears immediately on addition of a solution of iodide of potassium and starch, with diluted sulphuric acid. Nitrates are reduced to nitrides, at the ordinary temperature, by cadmium, zinc, and amalgamated zinc. By these reagents, M. Schönbein is able to trace very trifling quantities of nitrates, for instance, in the rain, which falls during storms. The phosphoreous vapours, which were until now believed to consist of phosphorous acid, are in reality nitride of ammonia. This is proved by the following experiment:—A sponge, saturated with water, is suspended for some time above a piece of phosphorus lying in water; the water is then squeezed out of the sponge, after which it is, by the afore-mentioned means, shown that a nitride is contained in it.

In the Medical Section, a communication by Professor Virchow on Tuberculosis was of chief interest. He spoke, as usual, in a quiet, lucid, and succinct manner. That which is even now-a-days designated as the specific product of tuberculisation in various organs, is only produced by a retrogressive metamorphosis, and does not possess specific qualities; and it may originate from newly-formed cells of the most various description. This process may be called inspissation (*verkäsung*—literally, cheesification). It is necessary to distinguish between tuberculosis and phthisis, the former being by no means frequently the cause of the latter. Consumption is very often caused by a simple inflammatory process, or a chronic catarrh, and interstitial changes in the tissue of the lungs. The speaker also directed attention to the ulceration, which sometimes occurs in cases of bronchiectasis, in the cavities of the bronchi.

Professor Friedreich, who has just published an excellent treatise on the Diseases of the Heart, spoke about the diagnosis of Obliteration of the Cavity of the Pericardium (growing together of the pericardium and the heart) during life; referring to several cases of this affection which had occurred in his practice. Dr. Meyer discussed the differences existing between the effects of the continuous and interrupted electric current. M. Schulberg spoke on the exanthemata which occurred after parturition, especially scarlet-fever, and showed its importance in causing Bright's disease in parturient women. Professor Kussmaul, who has just published a valuable treatise on Mercurialism, made some remarks on the diseases produced by mercury, and the anatomical changes connected with them, which were to be observed in working men who had to do with this metal. A very animated discussion ensued, after Messrs. Lindwurm, Friedreich, and Heine had expressed their views on syphilis. Most of the Doctors present were inclined to assume the existence of a twofold virus. The manner in which secondary syphilis was propagated, its relation to vaccination and small-pox, the curability of constitutional syphilis, and the hereditariness of the affection, were gone into. The existence and contagiosity of secondary syphilis was vindicated, in opposition to the views of Professor Hermann, of Vienna; and anti-mercurialism suffered another disgraceful defeat. Another very interesting communication was made by Dr. Lewin on the present state of Laryngoscopy; the same gentleman also demonstrated his apparatus for lighting up the larynx, which is very handy.

In the Gynæcological Section, several subjects proved attractive. There was, at first, an animated controversy between Messrs. Virchow and Roser on pyæmia, as it occurs after parturition; and in which the former was universally considered to have come off victorious. Roser struggled against the annihilation of pyæmia as a specific surgical entity, viz., absorption of pus and dyscratic disorder. But Virchow proved satisfactorily that pyæmia was only a collective name for very different processes, just as morbus Brightii for very different affections of the kidneys; that it was necessary to distinguish leukæmia, embolia with resolution and putrid decomposition, putrid absorption, septic endosmosis of gases, and primitive sepsis of the blood. M. Simon spoke on the operative treatment of vesico-vaginal fistula, in which he has been very successful. He introduced several cases which had at first sight appeared most desperate, and had nevertheless been entirely cured. His operation is that now universally adopted, with only trifling modifications.

In the Surgical section, Professor Burow, of Königsberg, spoke on the antiseptic qualities of the acetate of alumina, which he prefers to all other disinfectant and antiseptic substances. It is especially useful in embalming dead bodies. If your correspondent is not very much mistaken, this is the secret means employed by the celebrated *embaumeur*, M. Canale, of Paris. Professor Winter spoke on the Anatomical and Clinical Relations of the Pterygoid Bone. Professor Thiersch then gave a most interesting account of epithelial tumours, in which peculiar stress was laid upon the glandular formations which are observed in epitheliomata. He showed that the nests, or concentric nuclei, of epitheliomata often correspond to the cavities of pre-existing glandular cysts, in which an excessive growth of cells takes place; such as in the crypts of the mucous membrane of the cavity of the mouth, the sebaceous and sudoriferous glands, etc. The same gentleman exhibited nearly 100 microscopical preparations, which confirmed his views, and the injection of which excited general admiration. The plates on which the preparations have been represented, and which will soon be published, together with a special treatise on this subject, by M. Thiersch, are unsurpassed in beauty and faithfulness. This Surgeon uses a stereoscopic binocular microscope, as manufactured by Messrs. Beck and Smith, of London, and which is, no doubt, one of the best ever made. It is very desirable that the talented manufacturers should establish a branch business in Germany, where they would, no doubt, find an immense numbers of customers, as the microscope is nowhere so much used as in this country. M. Beck spoke on the isolated fractures of the lamina vitrea which he illustrated by experiments and preparations, and of which he narrated many instances. M. Van de Loo demonstrated the advantage of the gypsum bandage for fixing the hip-joint in cases of fracture. M. Bettinger showed a collection of rare preparations from the Hospital of Frankenthal, amongst which were a few skulls of cretins, microcephali, etc.

Professor Roser discussed some of the more important forms of the strictures of the urethra and their operative treatment, especially that of manifold stricture; and showed a new urethrotome, which is only slightly different from that of Civiale. Professor Baum, of Göttingen, communicated his experience on the cure of chronic tumours of the lymphatic glands of the neck, by means of compression. M. Pauli gave a statistical account of more than a hundred cases in which he had performed herniotomy. His results are exceedingly favourable, as out of 100 he lost only fifteen patients. He also spoke on diseases of the prostate gland, and showed some rare preparations of them, which were preserved in spirits of wine. Dr. Eulenburg made some remarks on the premonitory symptoms of malum Pottii, and on the prevention of the same.

Dr. Demme, of Berne, gave an interesting account of his experience during the last Italian campaign, concerning the effects of the new projectiles, and certain novel facts in pathological anatomy as to the injuries of certain tissues. He demonstrated a number of preparations which confirm his views laid down in a work just published by him on military surgery. There were preparations of bones, of the liver, the spleen, the intestines, the lungs, and the spinal cord, pierced by shot. He also spoke on extra-cranial cysts, which communicated with the sinuses of the dura mater, and of which only very few instances are on record; he related a remarkable case of this affection, which had occurred in his practice, and showed a preparation of it.

In the second general meeting, which was even more numerously attended than the first, and which took place on September 19, from ten a.m. to two p.m., it was resolved that a universal German Pharmacopœia should be written, and the introduction of a uniform medicinal weight be recommended to the several Governments. M. Jöller then spoke on the nutrition of plants, M. Schimper on certain phenomena of the growth and life of the plants, and Dr. Ule on the results of Heuglin's expedition into the interior of Africa, and African discoveries in general. A speech by Professor Virchow, "On the Influence of the Study of Natural History upon Popular Education," was received with great applause. He gave an historical sketch of the development of natural science and its relation to national life; he showed the importance of Scientific Congresses, and the injurious influence of State interference with scientific persuits and popular education. The present Congress had been so cordially welcomed by the people of Speyer and the whole Palatinate, that every member should feel it his duty to do everything for the people. The culture of body and mind should be equally attended to; and by a thorough development of each individual, the political life of the nation would gain more than by any direct participation of youth in political warfare. I may here remark that Professor Virchow is a very advanced liberal, that he intends to try his logics and oratorical powers in the next session of the Prussian Chambers, and that we may perhaps, at a future time, see the Professor of Pathological Anatomy on the ministerial bench. Although England is no doubt in many respects ahead of us concerning politics, it is only in Germany that an M.D. who has neither connexions nor an income of even £2000 a-year, but only genius, is not only allowed to have a political opinion, but that he may even enter Parliament with a fair prospect of working his way to power.

In the second general meeting the place for next year's Congress was chosen. The choice balanced between Dresden and Carlsbad, and I am sorry to say, that in spite of the many advantages offered by Dresden, Carlsbad was elected by a majority of twelve. This decision was especially brought about by the influence of the so-called great Germanic party (those who wish for a union of Germany with Austria). I will not attempt to describe the many festivities, illuminations, fireworks, concerts, etc., which took place in Speyer and its neighbourhood during the sitting of the Congress. The two most successful festivals were those at Berghausen and Neustadt on the Haardt; a great ball in the "Harmony" (the fashionable club of this place) also went off with great brilliancy. No discordant sounds were heard anywhere, many new friendships were formed, and old ones freshly cemented. The weather was magnificent throughout. The days after the closing of the Congress were spent by many of the

members in excursions through the Palatinate, where they were most hospitably received.

The last meeting took place on Tuesday, September 24, when most of the visitors, however, had departed. In the evening the Choral Union and the "Turnverein," as well as most of the burghers, united in a grand torch-light procession in honour of Professor Virchow, who had, as a speaker said, in 1860 powerfully urged the claims of Speyer to become the seat of the Congress, and had within the last few days again shown his warm attachment to the people. The Professor expressed his thanks in a few sentences, in which the noble character as well as the modesty of the man were conspicuous. "Auf Wiedersehn" was the general word of parting, and I believe there was scarcely anyone who did not carry back to his home a grateful as well as a pleasant recollection of the week spent in our old Imperial city.

SCOTLAND.

Edinburgh, December, 1861.

"Now is the season come when the nights grow colder and longer,
And the retreating sun the sign of the Scorpion enters."

So says Professor Longfellow; but, where the sign of the scorpion may be, or whether it would be found a judicious retreat from this stinging cold weather, is not for me to determine.

Our Winter Session has begun with a somewhat diminished number of students, which may be accounted for by the terrors of Preliminary Examinations, and the number who came up last year to escape them, but with no intention of spending this session in the schools. Some classes are, curiously enough, larger than usual. I hear that Professor Simpson's theatre is more crowded than ever. It may be fancy on my part, but I think the students are as a body sedater than they used to be, more formal, better groomed, wholly different to the specimen of the Medical student preserved in the British Museum, with his tight unmentionables, narrow-brimmed hat, and Belcher tie, who seemed to live by sucking the handle of a thick stick. What a happy change! How these healthy, steady young fellows wrestle with and overthrow Quain and Sharpey; at what a discount are "Pocket Remembrancers!" "Grinders" will soon be covered with the dust of age, and the verb to "pluck" restored to the poulterers, whence it came.

There has not been much going on in the Infirmary. Mr. Spence generally has some good material to show his numerous followers. When are you going to give us another notice of our Clinical Professor's "Observations"? Why are all the journals so silent, save the *Medical Times and Gazette* and the *Association Journal*, which deems the book above criticism? Why, there is a Chair of Biblical Criticism in this University; can any book, then, be above reviewing? I can imagine one being below notice, but one containing such valuable information, and many opinions contrary to those usually expressed by surgical writers, deserves to be ventilated and discussed. There was a long notice of it in the *Daily Scotsman*, for instance, quite recently, very vituperative against young men, and laudatory of the Author, whose most valuable writings, by the way, were published many years ago, and I am sorry to hear, on the authority of the non-professional paper I allude to, must for that reason alone be wholly worthless. One has merely to glance over them to see with what courage and clear-sightedness they were written, and what influence they have had, to feel assured that a man's youth has nothing to do with the question. A man may, please God, grow older and wiser, but he cannot grow younger except mentally, which some popular Medical writers do not seem to be aware of. Talking of age, one of our lofty houses, or "lands," fell lately, and about thirty victims to the picturesque, now in Earth's soft arms are reposing. It was a fine old house, a little above where John Knox lived and preached. The High-street on a Saturday night is crowded with labouring people, it seems to be the Corso of working Edinburgh, till a late hour they gossip the night away, for the next day is the strict Presbyterian Sabbath, when the merriest is expected to look austere, and, except the walk to Kirk, even air and exercise and general conversation are supposed to be forbidden things. Some were still loitering about when there was a cry of "Murther,"—policemen ran towards the cry and of course were followed by the crowd,—while they were away, the great house that had stood 300 years collapsed, much of it falling into the street. A drunken Patlander giving his wife her Saturday night's beating, after the custom of his country, had thus coaxed many from under an impending death.

But in the ruins were those who had sunk to sleep after the week's labour, their weary day was ended, they were dug out one by one, and as might be expected those who were hurt seriously were killed outright; so the cases taken to the Infirmary were, with one or two exceptions, not very serious.

But on the floor of two rooms in the police-office, covered with blankets, ranged with heads to the wall, so as to leave some central space for identifying friends to stand, lay the next morning twenty or more human beings because they could afford to give but a very moderate rent for lodging. There lay strong men with brawny arms still stretched over the wives and children they had worked for; there lay the old, lean, white-haired woman, still clasping the little granddaughter to her lean bosom. One woman, whose expression Gustave Doré could not draw, with starting eye and protruded blackened tongue, still holds two children in her arms. Most of them have expressions of suffering, as if in the terrors of some ghastly dream. Now I call these poor people "victims to the picturesque" advisedly, for had there been any word of taking this lanky edifice of half-wood, half-stone, all rottenness down, the daily papers would have been deluged with letters about iconoclasm, spoiling the city, destroying its antiquities, etc., etc. Ten to one, some sentimental, many-adjectived scribbler would have declared that this was above all other houses beloved of Sir Walter Scott; that Christopher North spent much of his life staring at it from over the way; that Lord Cockburn had declared that as the Colosseum was to Rome, so was No. 33, High-street to Edinburgh; and if all that did not do, we would have been told that Mary Queen of Scots was first introduced to Darnley at an oyster supper on these premises, or Prince Charles Edward had slept there. So our terrified Baillies dare not interfere, and the Dean of Guild satisfies himself with gilding, metaphorically, its exterior. Down, one wintry night, comes the house, and then we are told by our sentimentalists that it is only what was to be expected, that the wood which has given way was taken from the Borough-muir long years ago, and it is highly creditable to everyone concerned that it did not fall long ago. As to the sufferers and their friends,—(here misquotations of Scripture, *ad nauseam*).

A somewhat radical print, with great humour, has published a picture of the house "that is to fall *next*." They talk of surveyors and architects remedying the defects. If they were to send their shrewd and indefatigable police-surgeon, Dr. Littlejohn, round the town, to see what were or were not proper dwellings for their fellow-creatures, it would be more likely to be beneficial.

I forgot to mention that the Royal Infirmary has been enriched by the contributions of Mr. Du Chaillu, to upwards of a hundred pounds. Fancy "Troglodytes Gorilla, Esq., and lady," benefiting a charitable Institution in North Britain! Should they be as interested in making out the relationship as some naturalists seem, I for one am ready, for a similar sum, to quarter my arms, not myself, with theirs.

The Medico-Chirurgical Society began with a paper on Burns, by Dr. Myrtle, who has found that leeks, made into an ointment, will cure extensive losses of skin. Dr. Gillespie read a paper about the Wire Seton in Hydrocele, which they tell me was a good one.

The Physical opened with an eloquent address by Dr. Wright, a first-rate naturalist. Mr. Charlesworth, of York, showed many shells and a frilled lizard, like the Spanish Ambassador's description of Queen Elizabeth. One member, Mr. Bryson, has just perfected an apparatus for ascertaining the neighbourhood and whereabouts of icebergs: such a difficult task it seems to me like the old riddle, "Given the length and breadth of a ship to find the captain's name." *Vale!*

Academie de Medecine.—M. Vernois is the successful candidate in the section of Hygiene and Legal Medicine, M. Menière having received the largest number of votes after him.

GENERAL CORRESPONDENCE.

DIET OF DIABETIC PATIENTS.

Letter from Dr. Pavy.

[To the Editor of the Medical Times and Gazette.]

Sir,—As my account of the influence that various articles of food exercised upon the elimination of sugar in a case of diabetes, published in the last number of the Guy's Hospital Reports, has rendered necessary a few remarks from Dr. Camplin, so may I be permitted to consider that Dr. Camplin's letter, which you have inserted in your last week's impression, renders necessary a few remarks from me. May I, therefore, be allowed to claim your indulgence accordingly, conceiving, as I do, that the subject touched upon by Dr. Camplin is well worthy ventilation through your pages.

Dr. Camplin says, "I am induced to make these remarks, inasmuch as a cursory view of Dr. Pavy's case would lead the reader to suppose that the bran and gluten had better be dispensed with, since the urine and sugar (although far below what they were during the mixed diet) increased during their use." Such, I must say, is the opinion I have formed from the results observed in this and in other cases. I do not deny that instances may occur where it may prove desirable to allow the bran biscuit or gluten bread; but, looking at diabetes in the light there is reason to consider it ought to be regarded, the exclusion of food containing starch and sugar, rationally constitutes the most essential point in its treatment.

Without entering into any theory, it may be stated that the disease is attended with a want of proper assimilating power over the saccharine element of our food. When bread is consumed by a healthy person, its starch and sugar are so influenced after reception into the system, that they become susceptible of appropriation to the requirements of the economy. They no doubt administer to the production of fat, and are concerned with the maintenance of animal heat. In the case of the diabetic, starch and sugar do not follow a similar course. The saccharine principle remains unassimilated, and simply filters through the system unconsumed, creating in its passage through the blood such an alteration of its natural constitution, as to give rise to those disturbances and, but too often, fatal consequences concomitant upon this disease. From what I have seen, the intensity of the morbid symptoms vary with the degree of saccharine saturation of the blood; keep down the amount of sugar in the blood, as by avoiding its introduction through external sources; and although the patient's disease is not cured, yet his symptoms are relieved. By restoring the blood as near as possible to its natural constitution, we conduce to the healthy performance of the nutritive and other operations of life. But patients sometimes get rid of their complaint; and if there is anything than can favour the production of such an issue, I should say it is keeping down their sugar to the utmost extent possible. In North's case I never got lower than 569 grains during the day; but this was a reduction from upwards of 9000 grains, which he passed in a full mixed diet at the commencement. In another case, where the disease was of about the same intensity as in North, I once observed the sugar fall to 116 grains for the twenty-four hours, and the quantity of urine to 33 ounces. No one at this time could have judged that the patient was affected with diabetes, so robust and healthy an appearance did he present.

I must confess I cannot see the force of Dr. Camplin's argument about an animal diet being fit for the South American, and yet necessarily proving injurious to the Englishman, by producing "serious congestions," unless, as further suggested, "it either passed off very partially digested, or the diabetic drain continued to a considerable extent." I fully concede that man may be looked upon as naturally an omnivorous feeder; but there is sufficient evidence to show that either an animal or a vegetable diet may be taken alone, and will prove adequate for all the requirements of life. Vegetarians contend, from their personal experience, that we do wrong by taking any animal food; and it is a fact beyond dispute that the inhabitants of certain parts of the globe do not know the taste of vegetable food. Arctic discoverers relate to us that the inhabitants of the extreme North live purely upon animal food; indeed, there is none other procurable from the region they inhabit, for them to consume. Seeing that animal food contains all that is requisite for us, and that our organs are thus shown to be adapted to the digestion and assimilation of it, under the exclusion of any other, I cannot admit, with the known power generally possessed by the human body of accommodating itself to the most varied external circumstances, that the Englishman's capacity is limited within such narrow limits as to render him, "in his climate and with his occupations," incapable of subsisting on a purely animal regimen. But, beyond this, experience has not only now, but in former times, proved that the diabetic may be converted, and with advantage to his complaint, into an animal feeder. Use is truly, as well as proverbially, second Nature. After a little time I have seen, both in private and hospital life, the animal regimen taken with relish, and without leaving a longing after vegetable food. With the different kinds of meat and fish, combined with eggs, cream, and jelly, a sufficient variety may be easily obtained to satisfy the palate. But there is no reason that such vegetable materials as greens, spinach, and water-cress should be prohibited, as these do not prove injurious to the disease.

I am aware I have already trespassed considerably upon your space, but something is necessary to be said in answer to a remark concerning the large quantity of bran biscuits allowed to my patient, whose case has formed the subject of comment. We do not find at Guy's Hospital our patients satisfied with only a few ounces of bran biscuit or gluten bread per diem. On inquiry, I learn that about 14 ounces of bran biscuit (9 small biscuits) is the quantity allowed when it is ordered, and that a box of gluten bread containing 2lbs. is sent into the ward and expected to last four days. Some time since I had a patient whom I put upon gluten bread. At first I ordered that a box should last five days, but as he grumbled so much at his scanty allowance, I ordered it should last four, and then three days. Even now my patient was dissatisfied, and said that the box would only last him comfortably a couple of days. I believe if the patients can do with the small quantity recommended in Dr. Camplin's letter they will be willing to go a little further and do without any at all, and will be much the better for it. It is an old but true remark, that it is often less difficult to abstain than to be abstemious. It was not under my direction that my patient ate the 17½ ounces of bran biscuits consumed the first day he was allowed this food. He had helped himself to them, and I did not find out the quantity he had eaten till the following day, when I checked him, and reduced his consumption to 12 ounces. It is true the "poor" patient soon expressed his doubt—even within a few hours after he had commenced them—about the bran biscuit suiting him so well as a purely animal diet. He was guided, not, I believe, by the "quantity occasioning indigestion," but by the sensations resulting from the increased amount of sugar passing through his system, derived from the quality of the diet he was now taking. The urine presented a most marked change instantly the biscuits were commenced. From one to five in the morning, the urine contained just under sixteen grains of sugar to the ounce. The patient ate two of the small biscuits with a mutton chop at six o'clock, and partook of nothing else till ten. The urine he passed between five and nine contained nearly twenty-nine and a-half grains of sugar to the ounce.

I am, &c.

F. W. Pavy.

33, Bedford-place, Russell-square, December 3.

SUSPENDED ANIMATION UNDER CHLOROFORM.

Letter from Dr. Leared.

[To the Editor of the Medical Times and Gazette.]

Sir,—An interesting paper by Dr. Marcet, "On the Treatment of Suspended Animation from the Effects of Chloroform," appeared in the *Medical Times and Gazette* for November 16. He maintains that death sometimes occurs from spasm of the glottis; and as this appears to be highly probable, the following remarks may not be thought out of place.

I had, very lately, occasion to put a strong dog under the

influence of chloroform, preparatory to an experiment then in view. The drug was by no means used in excess; but the animal struggled violently against its inhalation. Insensibility was scarcely established, when respiration suddenly ceased, and the dog was apparently dead. It happened that a common bellows, having a thin tube without the usual thickened extremity, was at hand; this I at once introduced into the dog's glottis, by depressing and drawing forwards the tongue. By the aid of an assistant, who compressed the thorax after each inflation, artificial respiration was now kept up for about four minutes, when the natural function having been re-established, the animal soon recovered.

On a subsequent day the same dog was again put under chloroform, but I was this time careful to use it more sparingly. Respiration ceased, however, in a manner even more sudden and unexpected than on the first occasion, for the dog was at the time actually struggling. The bellows not being now at hand, an interval, as far as I could judge, of somewhat less than a minute, was lost in procuring it. Artificial respiration was performed as on the previous occasion, and continued for a much longer time, but without recovering the dog.

It seems to me evident that in both these instances no paralysis of the respiratory muscles ensued, because such an effect would have been preceded by some premonitory symptoms. On the other hand, the struggles of the animal might tend to produce spasm of the glottis.

On examination, I found the left cavities of the heart empty, while the right were engorged with blood. The brain seemed quite unaffected.

These accidents strongly impressed me with the necessity of the utmost promptness in establishing artificial respiration in all cases of suspended animation. Had the bellows been at hand on the second occasion, there can be no reasonable doubt that the dog would then also have been recovered. It would also seem from the much smaller quantity of chloroform now used, either that the dog was peculiarly susceptible of its action, or what is more probable, that spasm of the glottis on both occasions caused respiration to cease. Whenever artificial respiration is had recourse to in the human subject, it is accomplished by inserting a tube in the trachea from without. But precious time must be lost in the performance of tracheotomy even by the most dexterous operator, while in case of recovery a serious wound has been inflicted. From the experience gained in the case of the dog, I therefore venture to suggest as a substitute the introduction through the glottis of a properly-curved tube. The forefinger of the right hand might, under the circumstances, be most easily made to guide the tube, while the tongue is at the same time depressed and drawn forwards. Managed thus, I believe no difficulty would be experienced in passing the tube, even if spasm of the glottis at the time existed.

I am, &c.

12, Old Burlington-street. ARTHUR LEARED.

ON URANOPLASTICS.

LETTER FROM MR. HULKE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Were I to allow the letter of your Berlin correspondent in your impression of November 23, to pass unchallenged, it would imply a consciousness on my part of a mis-statement of facts in the remarks appended to a case of cleft of the hard and soft palates, published by me in your number of August 31, to which I cannot plead guilty.

It must be patent to all your readers that I laid no claim to the priority of having made a perfect cure, but distinctly stated that my own case was "not completely successful." The assurances which I have received from Mr. Fergusson and Mr. Pollock that they had completely closed several clefts in the hard palate by separating the soft tissues from the bone and uniting the edges of the flaps thus obtained, at dates prior to May, 1861, the date of Professor Langenbeck's first muco-periosteal uranoplastic operation, leave no doubt to whom the priority is due. The objection taken to these cases, viz., that the flaps were formed of mucous membrane alone, to the exclusion of the periosteum, is best met by reference to the anatomical relations of these structures; they are so intimately connected, particularly in front where they close the palatine processes of the superior maxillæ, that their clean separation in the dead subject requires a good dissector, and in the living person is an almost impossible task. I believe that in stripping the soft tissues, the periosteum, if not in its entirety, at least in part, is detached from the surface of the bone and included in the flaps, though this may not have been done intentionally, and certainly not with reference to the formation of a new bony vault.

Whilst I allow that Fergusson's lancet-shaped knife (originally devised for dividing the musculus levator palati) has too fine an edge—is too weak for the easy detachment of the periosteum from the bone, (Warren's knife I am unacquainted with, and I cannot procure one,) I know by experience that with Pollock's stronger knife, or raspatory, as it may very properly be called, the united mucous membrane and periosteum may be quickly peeled from the bone, leaving the surface of this bare. I do not say that the bone is thoroughly exposed at every point, because the irregularities of its surface prevent this, though even thin shavings are cut off some of these asperities, and brought down in connexion with the upper periosteal surface of the flaps.

Whether a blunt lever is preferable to Pollock's raspatory for stripping the bone of its soft covering, my own experience is too limited to enable me to decide with certainty. The positive statement that gangrene of the flaps is favoured by the use of blunt levers, which bruise the tissues, does not occur in my remarks, in which I merely mention the bruising necessarily attending the use of levers as probably conducive to this untoward event. Whether blunt instruments were first used by Langenbeck in uranoplasty for detaching the muco-periosteal covering from the bone, your readers can decide, when I tell them Messrs. Weiss made raspatories and levers on this plan for the late Mr. Avery in 1853 and before that year, Professor Langenbeck's first published case occurring on May 11, 1861. I have this morning seen one of Avery's levers, with a curved extremity and blunt chisel edge, ground on one side only. It will also be in the recollection of some of the gentlemen then attending King's College Hospital, that Mr. Bowman used an instrument of this kind in an operation on the hard palate, done in the theatre of that institution three or four years ago (a).

In conclusion, let me add that I entertain the highest respect for Professor Langenbeck; he has most certainly brought uranoplasty to great perfection, and was the first to demonstrate the great advantages of using the periosteum. I believe that the translation of his recent Memoir on this subject would be a great boon to Surgeons in this country.

I am, &c. J. W. HULKE.

10, Old Burlington-street, November 24.

AMPUTATION AFTER TEARING OFF OF THE FOREARM.

LETTER FROM ASSISTANT-SURGEON EVANS, R.N.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the *Medical Times and Gazette* of the 9th inst. I observed a "case where the forearm was torn off," and where the patient (after amputation had been performed) recovered without subsequent constitutional disturbance. Allow me to describe a similar case, but which occurred under more peculiar circumstances, on board H.M.S. *St. Jean d'Acre*:—

June 24, 1859.—While cruising off Malta, John C., an able-bodied seaman, aged 24, a fine muscular man, being engaged aloft, missed his footing and fell on to the upper deck. He was seen immediately after the accident, when it was found that the right arm was torn off above the elbow, only hanging by a small piece of the integument. In his descent he fell across the ridge-rope which supports the awning, and this must have caused the injury. Amputation was at once performed, about four inches below the shoulder, and the brachial, with two small arteries, were the only ones requiring ligature. The flap operation was adopted, and the patient was not under the influence of chloroform. On arriving in harbour next morning he was removed to the Naval Hospital, and in ten days was walking about. He left for England about two months after, not having suffered the slightest constitutional disturbance.

I am, &c.

EDW. H. EVANS, Asst.-Surgeon, R.N.

Royal Hospital, Greenwich, Nov. 18.

(a) Mr. Bowman tells me that this lever was made by Messrs. Weiss from one of Mr. Avery's.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 26.

DR. BABINGTON in the Chair.

A Paper, by Mr. RICHARD BARWELL, F.R.C.S., was read,

ON CERTAIN GRAVE EVILS ATTENDING TENOTOMY, AND ON A NEW METHOD OF CURING DEFORMITIES OF THE FEET.

The Author remarked that the purely mechanical treatment of club-foot, which had since 1832 been superseded by tenotomy, could as a rule deal very successfully with those lateral twists of the extremity which are called varus and valgus, but that the equinal deformity could hardly ever be cured by these means. This peculiarity is attributable to the great power of the muscles attached to the tendo-Achillis; for contracted muscles may be lengthened with an ease which is, *cæteris paribus*, in direct ratio with their power. At the present time the treatment of pes equinus is, above all others, simple and satisfactory, because division of the tendo-Achillis gives the means of lengthening this part in a few days. In a similar manner, though in different degrees, the treatment of all other deformities in which extension mingles is assisted by this section. The inward twist of the foot—varus—is now treated by division of four tendons at least (tibialis posticus and anticus, flexor longus digitorum and the tendo-Achillis), and frequently also of the plantar fascia. A very similar treatment is inflicted on valgus. "The peronei tendons are to be divided, or, together with them, those of the extensor longus digitorum and the tendo-Achillis, and also those of the tibialis anticus and extensor proprius pollicis, when they are retracted." Can we be surprised that after this there should be, as admitted by the above-quoted orthopædist, "difficulty in continuing sufficient support to the arch of the foot? and even after the arch has been perfectly restored, support is required during many months."(a) But if the deformity have arisen, not from spasm in the predominant muscles, but from debility of their antagonists, division of the still active tendons produces disastrous consequences. Mr. Barwell was led, four years ago, when examining some old cases of tenotomized feet whose actions were clumsy and ill performed, to doubt the desirability of dividing several other tendons as unhesitatingly as above described; and he thinks himself now in a position to explain the dangers and evils resulting from such practice. In 1842, M. Bouvier reported to the Académie Royale several experiments performed on the tendons about the feet of dogs, and one on a horse. In no one case did these tendons unite so as to be of any subsequent value. Moreover, there are examples on the human subject in a recent work on the "Reparative Process in Human Tendons." Mr. Adams has collected together all the cases he could get at of post-mortem examination after tenotomy. Amongst these there are seven in which other tendons besides the Achilles were divided, and in every one of them one or more of the severed tendons is either not united at all, or has become attached to the bone or surrounding parts, so as to be of no possible use hereafter.(b) The evident and sole conclusion from them is, that such muscles as the tibialis posticus and flexor longus digitorum might as well be struck by sudden and irremediable paralysis as be subjected to the knife of the tenotomist, and that the tibialis anticus is only a little better situated. Probably the peronei are quite as exposed to non or false union as the two first-named muscles, since their situation behind bones is analogous. Thus, to divide these tendons is to produce a lameness, perhaps less apparent, but more incurable, than that for which the operation was originally performed. Mr. Barwell then proceeded to question the necessity of dividing those tendons in order to restore the shape of the foot, quoting Dr. Little's opinion, that indiscriminate section was the rule, even with regard to the tendo-Achillis, and giving his own experience that division of the other tendons was hardly ever necessary. In support of this view he mentioned another curious result of the above-named autopsies—namely, that in one case an attempt had been made to divide the posterior tibial tendon, and the limb came so easily into shape that it was thought to have been divided, but after death was found to have remained whole. With all these facts before us, the Author said it was our duty to avoid dividing tendons about the foot, and to return to mechanical treatment. The mechanical shoes of the best form receive the foot, and then act simply by twisting it in a direction contrary to the abnormal bend. In such contrivances no heed is taken of the condition of the muscles nor of their direction, and they are all such as greatly prevent the power of walking. The Author makes the following propositions:—The balance of the foot is kept up by a set of muscles which antagonise one another. By abnormal predominance of any one set deformity is produced. The predominance may be from excessive contraction of the prevalent muscles, or deficient action of their antagonists. In either case our efforts should be directed to counteract the predominant force by applying a power in the direction of and as much like the deficient muscle or muscles as possible, and, at the same time, the foot must be allowed its use. These indications are thus carried out:—A broad and long piece of strapping-plaster, spread on a thick material, is made to adhere over the origin of the muscle and along its course. Upon this is laid a piece of sheet tin, long enough to reach from the upper part of the leg to just above the ankle, and carrying at its upper part a wire loop; the piece of strapping is turned back over it, and lies with its adhesive side outwards. Another piece of strapping is placed on the foot upon the insertion and along the course of the tendon; the end of this strapping reaches to the bend of the ankle, and is folded over (the two sticky sides opposed), and an eyelet let into it. An assistant is now to hold the limb as near as possible in the right position, while it is being smoothly strapped from the toes to the knee, leaving out the end (with its eyelet) of the piece on the foot and the wire loop at the upper part of the leg. Between these two—the one representing the origin, the other the insertion, of the muscle—there is to be stretched an india-rubber spring, at a proper degree of tension. Thus, while there can be considerable force used in the direction of any muscles in the leg, the *point d'appui* is so supported by a loop of strapping, which takes its bearings from both the skin of the leg and the surrounding plaster, that no injurious pressure occurs anywhere. There are also some little contrivances for changing the direction of the force,—as for the peronei tendons. Models showing this method and treatment were on the table, and cases of cure by these means were read.

Mr. HOLMES COOTE said that the Society felt indebted to the Author for his paper, although it touched upon a class of cases that had of late years received, it must be owned, a very large share of general attention. Mr. Coote had listened in vain for the grave objections to tenotomy; and as for the treatment of deformities by extension, that was a principle dating from the earliest epochs of Medicine. The three cases quoted by the Author in support of his principle were, as far as Mr. Coote understood them, 1, a case of paralytic talipes equinus; 2, a case of weak ankle; 3, a case of flat foot. Now it was well known that the treatment of such cases by mere mechanical appliances was very generally all that was required. Tenotomy was the exception. But the division of tendons he affirmed to be almost invariably necessary in cases of congenital deformity, to which the Author had not alluded. Experiments, as regards tenotomy performed on animals, were not satisfactory, owing to the impossibility of keeping the limb quiet or the bandages properly applied. It did not occur to him that the evidence offered by Mr. Adams, in his late work referred to by the Author, was opposed to tenotomy, but he (Mr. Coote) affirmed that even if some of the smaller tendons did occasionally adhere to the sheath or neighbouring parts (an accident which should not happen), that inconvenience was not to be allowed to weigh against the great advantage of enabling an infant with a club-foot to put the sole to the ground before the parts had become moulded to their abnormal position.

Mr. WILLIAM ADAMS observed, that when he first heard the title of the paper, he expected that a general onslaught would

(a) Brodhurst on Club-foot.

(b) An analysis of the cases justifying these assertions was appended.

be made on the practice of tenotomy, and that many serious evils would be traced to it, but was soon gratified to learn that the subcutaneous division of tendons was not objected to by the Author. He had listened for the grave evils suggested by the title, and thought that after hearing the paper the Society might still ask what those evils were? He had heard only of certain imaginary evils possibly resulting from the non-union of the posterior tibial tendon, or from the adhesion of the divided extremities of this tendon to the bone, and he was surprised that all the facts stated in the paper had been taken from his own (Mr. Adams's) book, on the "Reparative Process in Human Tendons," in which one instance of non-union of the posterior tibial had been recorded, and another in which non-union appeared probable, but not certain, as the reparative process was proceeding. Other cases had been quoted in which this tendon had become adherent to the bone, but no evils or ill effects to the patients had been traced to these results, and it might be a good Surgical compromise to cure a case of severe club-foot, even at the more or less complete sacrifice of the posterior tibial muscle. The adhesions described might limit, but would not completely destroy the action of the posterior tibial muscle. In reference to this point Mr. Adams did not consider that the Author's statements were accurate, or that the analysis of his cases had been fairly made. Aware of some evils arising from imperfect union of the posterior tibial tendons, he (Mr. Adams) had now adopted the plan of extending the muscle by bandaging the foot to a splint, for a week or more before the operation, and making the after extension very slowly. The Author appeared to consider that tenotomy was unnecessary in paralytic deformities, but according to his (Mr. Adams's) experience, these were the cases from which the most brilliant results were frequently obtained, when the cases were judiciously selected and treated. Children and adults who had not walked for several years, or who had never walked, were frequently enabled to do so with mechanical supports after the contractions had been removed by tenotomy. Again, in reference to the method of treating deformities of the foot proposed by the Author of the paper, he had listened in vain for novelty, and the plan of making extension by India-rubber bands was certainly not new. He (Mr. Adams) had seen a great variety of instruments constructed upon this principle, four or five years ago, by Mr. Bigg, who had applied them extensively, and had adapted them to some cases in St. George's Hospital. The continuous and increasing pressure produced by the elastic force could not be borne in many cases, and in some instances had to be discontinued from the sores produced, so that it was best adapted to severe cases. It was much better to regulate the force by means of the cog-wheel. The views of the Author were not new; this plan of treatment was only adapted to slight cases.

Mr. Pollock desired to remind the Society that the last speaker was in error in saying that Mr. Bigg made trials of instruments in St. George's Hospital. Mr. Bigg was instrument-maker to the Hospital, and as such he merely acted under the directions of the Surgeons.

The Author, in reply, said he was aware that the cases he brought forward were not of the most obstinate description; but from the ease with which his treatment reduced all pedal deformities except equinus, he had no fear whatever that it would fail in the most severe form of varus. The necessity for rapidly changing the position of the foot in congenital varus was illusory, since section of the tendons was undertaken long before the child could use the foot; and his plan of treatment would bring the sole into the walking position before the infant was old enough to stand, and have the additional advantage of preserving some use in the muscles. As to tenotomy in paralytic cases, the Author could not agree with Mr. Adams that such practice was successful; on the contrary, he had seen many cases in which deformity had only been changed for a worse evil. Surely it is not reasonable nor physiological when certain muscles of a limb are paralysed, to divide the others? His (the Author's) plan is simply to supply the amount of force necessary to the weakened parts. The success of this plan might be seen in the sample of flat foot which he (the Author) asserts arises from defect of power in the tibialis anticus muscle. He could easily understand that Mr. Bigg should find india-rubber bands produce slough; such result depends upon the mode of adaptation. When used according to his method, no such accident would follow.

A paper, by Mr. Charles H. Moore, F.R.C.S., was read, entitled

OBSERVATIONS ON THE DIVISION OF THE GUSTATORY NERVE, AND ON THE LIGATURE OF THE LINGUAL ARTERY, IN THE TREATMENT OF CANCER OF THE TONGUE.

The principal object of the Author was to revive an operation which had been devised by Mr. Hilton, once practised by him in the year 1850, and though of much value, never again performed.(c) Amongst the many sources of the peculiar painfulness of cancer of the tongue, irritation of the fifth nerve could be assigned as occasioning the pain of so much of the tumour as was in front of the fauces; the tenderness of the ulcer, the pain in the regions of the parotid, ear, temple, and crown of the head, and the excessive secretion of saliva. All these being traceable to the encroachment of the disease on the gustatory branch of the fifth, the section of that nerve between the disease and the brain should relieve them. The cases showed much relief to be instantly afforded when the nerve had been divided. The operation, as practised by Mr. Moore, consisted in cutting through all the soft structures on the inside of the ramus of the jaw by an incision, commencing immediately behind the last molar tooth, and extending three-quarters of an inch in a direction towards the angle of the jaw. The only structures which could be divided by such an incision were the mucous membrane and a part of the mylo-hyoid muscle, with the gustatory nerve descending forward between them, about half an inch from the tooth, and nearly at a right angle with the direction of the incision. It was advisable to operate with a curved knife, as the alveolar ridge might shield the nerve from the edge of a straight one, and also to cut outwards quite to the bone. The author had operated in five cases of cancer of the tongue, three of which were given at length. The relief was immediate. Salivation, the pains and tenderness of the tongue, and the reflected irritation of the fifth nerve, were all gone at once. Soreness of the wound, with swelling, remained for some days; but after that the patients took food, swallowed, and spoke with comparative ease. They slept, and improved in general health. The tongue in each case was absolutely insensitive on the side operated on from the anterior pillar of the fauces forward, and no sæpid substances aroused taste in those parts. One patient frequently, on awaking from sleep, found himself chewing the cancerous mass in his tongue between his toothless gums, but the compression occasioned him no pain. The relief was permanent so far as the gustatory nerve was concerned, but when the disease invaded the area of the glosso-pharyngeal nerve, new pain arose. One patient had been operated on in August, and had no return of pain up to the present time—a period of three months. In the last-mentioned case the Author had attempted to benefit the patient, in whom extirpation was unsuitable, by withdrawing from the tumour its nourishment of blood, in addition to its nervous influence. He accordingly tied the lingual artery on the side of the disease two days after he had divided the gustatory nerve. The ulcer became paler after the operation, but neither sloughed nor healed, and in five weeks the whole tumour was perceptibly smaller than before the operations. From that time the tumour began again to increase. The Author had desired, upon the renewal of growth in the tumour, to tie the opposite lingual artery also, but the patient was content with the amount of ease which he was enjoying, and indisposed to incur a renewal of the pain which had followed the first operation.

Mr. Holmes Coote thanked the Author for his paper, adding that cancer of the tongue was a disease attended with such pain and distress, that any measure offering a prospect of relief should be thankfully received and investigated patiently. He could not recall a case of permanent cure of the disease after any operation, however skilfully performed.

Academie des Sciences. — M. Henri Sainte-Claire Deville has been elected into the place of section of Mineralogy by fifty-one out of fifty-seven votes present, vacant by the death of Berthier. Brother of Charles Sainte-Claire Deville, M. Henri Deville has much occupied himself with researches on aluminium. It is entirely owing to his exertions that this metal, hitherto so imperfectly known, has been brought within the domain of useful application.

(c) Guy's Hospital Reports, Second Series, vol. vii. p. 251.

THE PATHOLOGICAL SOCIETY.

TUESDAY, NOVEMBER 19.

DR. COPLAND, President, in the Chair.

(Continued from page 570.)

Mr. NUNNELEY showed a specimen of

STRICTURE OF THE ŒSOPHAGUS WITH ABSCESS OPENING INTO IT AND THE BRONCHIAL TUBE.

I saw the subject from whom this preparation was taken a month before his death. He was a large man, reduced to a perfect skeleton. He had possessed property and occupied a farm, but being reduced to poverty, he had latterly been employed as a porter in a dusty warehouse, to which he attributed his illness. This, he had been told, and had been treated for, was a stomach complaint. He had for some time noticed an increasing difficulty in swallowing, which for upwards of a fortnight had prevented him from taking any food whatever, all food, whether liquid or solid, being rejected before reaching the stomach. He had no pain; the respiration was feeble, but not difficult; when quiet there was no cough, but he continually spit up without effort a considerable quantity of pus. He was extremely hungry, in fact was dying of starvation. With the exception of the extreme emaciation he had not an unhealthy appearance. There was neither swelling nor tenderness in the course of the œsophagus, and no abnormal respiratory sounds except the feeble murmur. I saw him more than once attempt, which he did most carefully, to swallow both liquids and solids but after passing some distance down the œsophagus they were rejected with violence and a sense of suffocation. Nutritious enemata with a few drops of laudanum gave him very great relief, and if not followed, as he thought, by an increase of strength and flesh, at least prevented much more wasting. For upwards of six weeks, except on one occasion, nothing whatever was swallowed. I had passed a long tube down the œsophagus until I found it stopped, when a considerable quantity of offensive pus passed up the tube. Shortly after this he drank freely three cups of tea and was able to do the same the following morning, but never afterwards. A few days after this I yielded to his entreaties and again passed the tube as carefully as possible, when I distinctly felt it leave the line of the œsophagus and pass into a cavity. A choking sensation with cough and expectoration of pus was immediately induced, but no power of swallowing. A few nights afterwards he spit up and vomited several ounces of most offensive bloody matter. He died from exhaustion a week afterwards. On post-mortem examination, I found the œsophagus, towards its lower third, quite impervious for a short distance, with a large opening above this spot into a considerable abscess, which also had a free opening into the bronchus; so that there was a ready communication between these two tubes. The dark glands about the bifurcation of the trachea were numerous and large, and there was a good deal of consolidation of the tissues here. All the thoracic and abdominal viscera were healthy. Both clavicles had been broken and united very irregularly. This accident was occasioned by his horse falling with him when tired after a long day's hunting. He was much hurt from the horse rolling on him. This happened about two years before his fatal illness, and is more likely to have been the origin of it than the dusty warehouse to which he attributed it.

AORTA FREELY COMMUNICATING WITH BOTH VENTRICLES, THESE WITH EACH OTHER—SMALL AND THIN-WALLED PULMONARY ARTERY, WITH VERY SMALL SLIP-LIKE OPENING INTO THE VENTRICLE—OPEN FORAMEN OVALE.

The young person from whom this specimen was taken lived till she was nearly fifteen years old. She had from birth exhibited symptoms of marked cyanosis, at least the symptoms detailed to me when I first saw her would leave no doubt that such was the case. I watched her for upwards of three years before her death, which took place after a short illness, in which, though there was some cough and expectoration, obstinate diarrhœa was the principal ailment. She was poorly developed both in mind and body, very feeble, very indolent, sat crouching over the fire, was capricious and obstinate in temper, took very little interest in anything, generally, but not invariably, was indisposed to take exercise, and her appetite was amazingly small. Her colour was always a dull leaden hue, the extremities being cold, moist, and almost purple. The respiratory murmur was very feeble indeed. The action of the heart was rapid and confused, and had a most remarkable sound and impulse which I do not recollect to have perceived before, nor to have seen noticed by others, but which, independent of the cyanosis, at once led me to diagnose a free communication between the two sides of the heart, though I imagined this rather to be between the two auricles through the foramen ovale than between the two ventricles, as it proved in a greater degree to be. Instead of the usual direct forward impulse caused by the tilting forward of the apex of the heart across the systole, there was also perceived a distinct lateral distending movement, accompanied by a peculiar buzzing sound and tremor, both probably caused by the free communication between the two sides of the heart, allowing this lateral pressure when the heart contracted, and the almost single aortic exit (for the minute aperture into the pulmonary artery could allow very little blood to pass). When the ear was laid directly upon the chest both these abnormal indications were very peculiar, and would, I should imagine, be met with in similar cases. The walls of the right ventricle are thicker in proportion to the left than natural The tricuspid valve is imperfect, one portion is large and thick, one is tied down by short carneæ columnæ, and the third, that before the aortic opening, is very small. The opening into the pulmonary artery is a mere slit, which projects into the vessel, and is not more than sufficient to admit a probe, while there is an aperture into the aorta and left ventricle sufficiently large to admit the finger. The sides of this orifice are thick, round, and smooth. The walls of the left ventricle are thinner than those of the right, one portion of the mitral valve is much larger than the other. The right auricle is large and thick, the foramen ovale is sufficiently large to allow a quill to pass. The walls of the aorta are thick, and its valves natural, while the pulmonary artery is small and thin. The ductus arteriorus is closed. In the apex of both lungs were some very small tuberculous cavities. The whole tissue of the lungs, however, was so very solid and the air-cells so very little developed, that several of the different portions tried sank in water. The abdominal viscera were very small, but otherwise not unnatural. It is obvious that such a conformation as here disclosed could have allowed of very little blood passing through the lungs. A nearer approach to the condition of the circulation in the higher of cold-blooded animals is not often found compatible with the preservation of life in man to the age of fifteen years.

(To be continued.)

JUNIOR MEDICAL SOCIETY OF LONDON.

THURSDAY, NOVEMBER 21.

MR. ALEXANDER SQUIRE, President, in the Chair.

THE meeting on this occasion was held at the London Hospital.

Mr. L. S. LITTLE, of the London Hospital, read a paper on

THE DISTINCTIONS BETWEEN SIMPLE AND MALIGNANT EPITHELIAL GROWTHS.

The Author entering upon the immediate consideration of the subject of epithelial growths of the lip, mentioned the broad classification of tumours into two great divisions, simple and malignant, and having fully discussed their individual characteristics as opposed to one another, and having dwelt upon the importance of a correct and early diagnosis during the patient's lifetime, proposed to treat the subject under two forms of question:—1st. "Whether malignant growths can be distinguished?" 2nd. "Whether their distinction is of sufficient importance to be attempted?" The Author answered the second question first for obvious reasons. He said that it might be done either by contrasting the general clinical history of the cases, or the anatomical characters of the tumours; in the advanced stages he considered that clinically there were two classes of epithelial

tumours, and he fully discussed the leading features of each; he then alluded to the importance of inquiring whether they clinically contrasted in their earlier stages, and arrived at the conclusion that they did not, and suggested, that, as the clinical history could not aid us, we must have recourse to the pathological contrasts. He then entered upon the general pathological characters of the two tumours, and defined an epithelial cancer to be a growth made up of cells, closely resembling epithelial cells, with associated granule globules and fat; having contrasted the characters of the two classes of tumours, he entered upon a consideration of their elements, and said that they differed in three ways. 1. In disposition. 2. In form. 3. In structure. Upon each of these points of contrast he dwelt at some length, and illustrated them with numerous drawings. To Dr. Andrew Clarke he acknowledged himself indebted for the preparations from which the drawings were taken. The Author then summed up his arguments by inquiring what were the structural characters that first determined the nature of any growth, and enumerated the following:—The cells of a tumour having secondary cells in their interior shooting out irregular processes; double or more vesicular nuclei, large in proportien to their cells; nuclei growing into cells, and retaining their embryonic character, and undergoing involution without previous development into texture; cells attacking or invading the textures; these characters being found, the tumour may be said to be assuming a malignant nature. The Author concluded by saying, that the microscope was of essential service in aiding the diagnosis of epithelial tumours of the lip, and for that purpose maintained that the suspected tumour should be punctured, or incised, according to its condition,—the opportunity of making such an examination might not always exist; or, making it, we might fail in discovering the distinction. Still cases would occur in which our object might be attained, and the truth of these statements confirmed.

An animated discussion ensued, in which the following Members took part, viz.:—Messrs. Julius Clarke, Deck, Stevenson, Powell, Hills, Morton, Hawthorne, Andrew Clarke, etc.

Mr. Tidy (London Hospital) showed a specimen of Excessive Curvature of the Spine in a woman aged 45; the viscera of the thorax and abdomen were very much compressed. It was a case of strumous disease, involving the whole spine except the last vertebra.

Mr. Woodman (London Hospital) related a case of Favus in the person of a man who had kept white mice.

Mr. Little then replied, and received an unanimous vote of thanks for his interesting Paper.

The next meeting will be held at University College, on Tuesday, December 10.

After the Ordinary Meeting, a Council Meeting was held, when the officers for the ensuing year were elected by the Delegates representing the several Hospital Medical Societies in Union, from among their own number:—President, Mr. W. Fairlie Clarke, King's College. Vice-Presidents: Mr. W. Travers, Charing-cross; Mr. C. H. Fagge, Guy's; Mr. J. Wood, King's College; Mr. J. W. Watson, London; Mr. S. G. Freeman, St. George's; Mr. E. Clapton, St. Thomas's; Mr. H. C. Bastian, University College; Mr. Christopher Heath, Westminster. Treasurer, Mr. S. G. Freeman, St. George's. Hon. Secretaries: Mr. F. W. Cooper, Charing-cross; Mr. J. F. Deck, St. Thomas's. Members of Council: Mr. E. A. Browne, Charing-cross; Mr. J. H. Galton, Guy's; Mr. T. Stevenson, Guy's; Mr. T. Morton, King's College; Mr. J. Dyte, London; Mr. G. Weller, ditto; Mr. T. Murray, St. George's; Mr. F. H. Gervis, St. Thomas's; Mr. J. T. Jones, University College; Mr. W. H. F. Power, University College; Mr. Frith, Westminster; Mr. Candell Clarke, Westminster.

The Medical Benevolent Fund.—The following donations have lately been received by the Treasurer of the above-named excellent charity:—Miss Cave Browne, Birkenhead, £2, (2nd); Edmund Smith, M.D., Otley, York, £5, (2nd); W. B. Page, Esq., Carlisle, £5 5s., (3rd); Mrs. Duckworth, London, £21, (2nd); Miss Baron, Cheltenham, £50, (4th); A Member of the Committee, £100, (9th); Gurney Hudson, Esq., Norwich.

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE AT THE UNIVERSITY OF OXFORD.

No. I.

Oxford, November, 1861.

PHYSIOLOGY AND ANATOMY.

Practical Examination.

1. Make a dissection of the muscles and vessels on the palmar surface of the thumb in the arm laid before you.

2. What inference do the skeletons put before you enable you to draw as to the sex of the individuals to which they belonged? Put in writing the measurements which you may think of importance as bearing upon the conclusion you have come to.

3. Give a detailed description of the preparation put before you and labelled No. 3.

4. Give an account of the object under the microscope.

No. II.

1. What are the different substances detectible in the fluids excreted by the skin?

What common articles employed as food or medicine may find their way into these fluids?

2. In what points has the secretion of the pancreas been shown to differ from that of other salivary glands? What are the principal sources of error to which experiments upon this gland are liable?

3. What is the seat of the formation of urea? Upon what conditions does increase or decrease of the quantity of this substance excreted depend; and by what process is such increase or decrease estimated?

4. Give an account of the action of plants upon the atmosphere, and of the effects of certain gases upon living plants.

5. What are the different functions subserved by the roots and by the floral envelopes of plants respectively?

6. Describe the plants laid before you and labelled 1, 2, and 3.

What plants from the natural orders to which these belong are employed in medicine?

No. III.

Physiology and Anatomy.

1. Describe in full the several attachments and foramina of the diaphragm.

2. Enumerate in order the several constituents of the spermatic cord.

3. Give the origin, course, and connections of the phrenic nerve.

4. What region of the body is, upon anatomical grounds, the most eligible for the formation of an artificial anus?

5. What structures do you find situated between the two supra-renal capsules?

6. Explain the cause of the pulse, and enumerate the different normal conditions of life which affect its frequency.

7. What are the most constant senile changes?

8. Enumerate the several factors which make up the portal vein, and state the differences observable between the blood it contains and that which is found in the hepatic trunks.

9. What objects are brought into view by reflecting the platysma myoides?

10. What is meant by "secretory and nutritive reflex phenomena?"

No. IV.

Mechanical Philosophy.

1. How is it ascertained that the force of gravity is different at different places on the earth's surface?

2. Explain the mechanical principle of the balance. What are the requisites of a good balance, and how are they obtained?

3. Explain the terms momentum, force, mechanical work, vis viva.

4. Describe some of the experiments which illustrate the phenomena of endosmose.

5. By what means can the quantity of aqueous vapour present at any time in the atmosphere be determined?

6. How is the volume of a gas affected by changes of temperature, and of pressure?

7. Define specific gravity. How are the specific gravities of vapours taken?

8. Describe a compound microscope, and explain the optical principles involved in its construction.

9. How can an electric current of constant intensity be obtained?

10. What explanations are given of the following phenomena: the trade winds—the Gulf Stream—the coldness of elevated districts?

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, November 28:—

Brünjes, Martin, London Hospital
Brown, John Woodruff, Wymeswold, Loughborough
Belemore, Alfred John, Harlesdon, Middlesex
Hedley, Edward Anthony, Felton, Northumberland
Rendle, James Davy, Beaminster, Dorset
Tibbits, Edward Thomas, Uttoxeter, Staffordshire
Watts, Edward, Liverpool.

APPOINTMENTS.

CURTIS.—Collins Curtis, M.R.C.S. Eng., has been appointed House-Surgeon to the Great Northern Hospital, King's-cross.

EDWARDS.—Walter Edwards, M.R.C.S. Eng., L.S.A. Lond, has been elected Medical Officer for District No. 4 (Ottery St. Mary) of the Honiton Union, Devonshire.

FURBER.—George Henry Furber, M.R.C.S. Eng., L.S.A. Lond., has been elected Medical Officer and Public Vaccinator for District No. 2 of the Maidstone Union.

JENNINGS.—Dr. Jennings has been elected Medical Officer to the South Dublin Union.

JOHNSON.—Metcalfe Johnson, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer of the Workhouse, Lancaster, and the Lancaster District.

WILLIS.—William Willis, M.D. Edin., M.R.C.S. Eng., L.S.A. Lond., has been appointed Assistant Medical Officer at Japan.

DEATHS.

CROFT.—Lately, at Ruyton-of-the-Eleven-Towns, Salop, John M. Croft, M.R.C.S. Eng., aged 71.

GILPIN.—November 28, Bernard Gilpin, of Belle Vue House, Ulverstone, Lancashire, F.R.C.S. Eng., formerly Surgeon R.N., aged 71.

HALL.—November 27, John Hall, of West-road, Congleton, Cheshire, M.R.C.S. Eng., and Justice of the Peace, aged 76.

HAMILTON.—Recently, Frederick Gustavus Hamilton, L.R.C.S. Irel., Assistant-Surgeon to the 1st Battalion Grenadier Guards.

KEMP.—November 29, at Newlay House, near Leeds, William Walker Kemp, of Horbury, near Wakefield, Yorkshire, M.R.C.S. Eng., L.S.A. Lond., aged 40.

LINAREZ.—October 5, at Valparaiso, Dr. Linarez, ex-President of Bolivia.

METHVEN.—November 29, at St. Andrews, Fifeshire, William Lambert Methven, M.D., Surgeon R.N. on the retired list, (seniority March 30, 1846).

REES.—September 1, at Wanganui, New Zealand, Joseph Rees, M.D.

SYME.—September 28, at Cape Town, Cape of Good Hope, George Henry Syme, M.D., F.R.C.S,

TIMMONS.—November 21, at Navan, Co. Meath, Dr. John Timmons, aged 72.

VINCENT.—November 27, George Vincent of Englefield-green, Surrey, formerly of Sloane-street, Chelsea, M.R.C.S. Eng., L.S.A. Lond., aged 59.

WESTON.—November 27, Spencer Weston, of Carshalton, Surrey, M.R.C.S., Eng., L.S.A. Lond., aged 47.

CONSUMPTION HOSPITAL, BROMPTON.—Dr. Pollock has been elected Physician to this Hospital. He had acted for several years as Assistant-Physician.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The following gentlemen will be balloted for, as Fellows of the Royal Medical and Chirurgical Society, on Tuesday evening, December 10, 1861. The ballot will be opened at half-past seven o'clock, and will close at half-past eight precisely:—Robert Barnes, William Henry Hayward, Charles Morehead, John E. Morgan, A. T. H. Waters, William Spencer Watson.

BETTER LATE THAN NEVER.—It seems that the success of English and American Surgeons in the operation of ovariotomy is at last likely to obtain some recognition in France. One would have thought that the statistical accounts so repeatedly published would have long ago led to this result; but it is to be really due to M. Nélaton's recent visit to London. He concluded his address on the subject at La Charité, after his return, with these two not very positive propositions:—1. Surgeons should be encouraged rather than blamed when disposed to practise ovariotomy in cases in which they believe it indicated. 2. The operation is indicated when a multilocular cyst begins to give rise to wasting away (*dépérissement*) or to a series of unfavourable symptoms.

THE Post-office staff in the British Isles in 1860 numbered 25,282 men, of whom 11,428 were postmasters, 11,889 letter-carriers and messengers, and 1634 clerks. Of the above number 3650 were employed in the London district alone, and every attention was paid to their comfort and health. The health of the establishment was never so good as in 1860. It will be gratifying to the advocates of the competitive system to learn that every candidate for a postmen's place had his muscular power tested by the dynamometer, and that out of 568 candidates only 76 were ejected. Much of the improved health of the superior officials is attributed to improved ventilation and more commodious offices, while so simple an expedient as the substitution of Inverness capes for the old Macintosh among the minor officials has done very much to decrease the "postman's disease," as it is called—the rheumatism. The total mortality among the effective and pensioned officers of the department was 42, out of a total of 2826, or at the rate of 14·8 per 1000. The most common diseases after rheumatism were those of the lungs and of the brain and nervous system.

PATHOLOGICAL SOCIETY OF DUBLIN.—The first meeting of the above Society for the present Session was held on Saturday, the 30th ult., in the Anatomical Theatre of Trinity College. Several interesting communications were made, after which the following Officers were elected for the ensuing year:—*President:* John T. Banks, M.D., King's Professor of the Practice of Medicine in the School of Physic. *Vice-Presidents:* Joseph O'Ferrall, Samuel Gordon, James S. Hughes, Alfred H. M'Clintock, Robert Mayne, Jolliffe Tufnell. *Council:* Robert Adams, Thomas Beatty, Dominick J. Corrigan, Fleetwood Churchill, Christopher Fleming, John Hamilton, Alfred Hudson, Edward Hutton, Robert Law, Cathcart Lees, Benjamin G. M'Dowel, Josiah Smyly. *Honorary Secretary:* William Stokes. *Secretary and Treasurer:* Robert W. Smith. *Secretary for Foreign Correspondence:* Robert D. Lyons. The subject of the Essay for the Society's Gold Medal, to be awarded at the close of the Session, was announced to be, "The Diagnosis and Pathology of the Diseases of the Larynx and Trachea." On the evening of Friday, the 29th ult., the outgoing President, Dr. Fleming, received the Members of the Society, and a large number of the *élite* of the literary and scientific circles of Dublin, at a brilliant and agreeable *conversazione*, at his residence in Merrion-square.

M. DE REICHENBACH ON PHOSPHORESCENCE.—The experiments of M. De Reichenbach tend to prove that phosphorescence is a usual consequence of all molecular phenomena, and not the result of combustion or oxidation. Mr. Phipson proved this last point some time ago, when he showed that dead fishes shine in the dark, even under water, and in the absence of oxygen. According to M. De Reichenbach there is phosphorescence during fermentation or putrefaction, crystallisation, evaporation, condensation of vapours, the production of sound (vibrations therefore), and the fusion of ice; a considerable glow is remarked when a galvanic pile in activity, a block of ice in fusion, or a solution of sulphate of soda in the act of crystallising is observed in the dark. The human body itself is not devoid of phosphorescence: in a healthy state it emits a yellow glow; when in ill-health the glow becomes red. The author considers that this observation may possibly be of use in diagnosis. To perceive these phenomena the eye ought to have been previously rendered sensitive by remaining some hours in perfect darkness, and even then all eyes are not equally impressionable. But, if several persons unite in performing the experiment together, there will always be a certain number who are able to see the phenomena. These facts of the production of light remind the author of observations published some time, ago by M. Wullner, according to which every molecular movement is accompanied by a disengagement of electricity.—*Poggendorff's Annalen*, vol. cxii., p. 459.

BOOKS RECEIVED.

Influence of Tropical Climates. By Sir J. R. Martin. London: 1861.

Palæontology. By R. Owen, F.R.S. Second Edition. London: 1861.

Galloway's Chemical Tables. London: 1861.

Medical Climatology. By R. E. Scoresby-Jackson, M.D. London: 1861.

The Climate of England. By G. Shepherd, C.E. London: 1861.

Invalid's Companion to the Continent. By Edwin Lee, M.D. London: 1861.

A Notice of Mentone. By Edwin Lee, M.D. London; 1861.

Unity of the Human Species. By R. Dunn, F.R.C.S. London: 1861.

A Letter to Sir B. Brodie. By W. Sharp, M.D., F.R.S. London: 1861.

Defective Palates. By G. Williams, M.C.D. London: 1861.

Elementary Treatise on Physics. By E. Atkinson, Ph. D. London: 1861.

Footsteps of Shakspere. London: 1862.

Transactions of the Ethnological Society. Vol. I.

Transactions of the Pathological Society. Vol. XII.

Mental Philospohy, on the Inductive Method. By J. D. Morell, A.M. London: 1862.

Le Docteur Rilliet. Par M. A. J. Duval, D.M. Genevè: 1861.

Statistical Reports from St. Thomas's Hospital.

VITAL STATISTICS OF LONDON.

Week ending Saturday, November 30, 1861.

BIRTHS.

Births of Boys, 880; Girls, 911; Total, 1791.
Average of 10 corresponding weeks, 1851-60, 1683·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	721	703	1424
Average of the ten years 1851-60	650·4	660·8	1311·2
Average corrected to increased population ..	..	..	1294
Deaths of people above 90	..	..	3
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	5	11	2	6	5	5
North ..	618,201	..	4	13	4	12	9	3
Central ..	378,058	..	2	22	1	8	12	1
East	571,129	4	2	12	3	19	16	5
South ..	773,160	..	4	23	8	10	10	8
Total.. ..	2,803,921	4	18	81	18	55	51	20

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·696 in.
Mean temperature	44·5
Highest point of thermometer	57·8
Lowest point of thermometer	26
Mean dew-point temperature	41·4
General direction of wind	S.W.
Whole amount of rain in the week	0·36 in.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Druitt's letter shall appear next week.

Dr. Symes's letter on Methylated Spirit shall appear next week.

G. T., Portsmouth, should apply to the Secretary of the College of Dentists, Cavendish-square.

Dr. Kidd will see that we have given an abstract of the American Report on Ether and Chloroform. His belief that Ether would be very hazardous in Ovariotomy is not borne out by fact. At least Dr. Richardson gave it in one of Mr. Spencer Wells's cases with excellent effect.

Several Letters on the Turkish Bath have been received. They are under consideration, but some are disfigured by personalities, which render their insertion impossible in a scientific journal.

M.D.—It is the universal custom of Medical writers to give their addresses at the end of the Preface to their books: and it is quite legitimate. We do not like to see an address put prominently in a Title-page, nor in an advertisement; but it is quite right on all grounds that every man who issues a public document should let it be known who the writer is, and where he is to be found.

A Correspondent calls our attention to a circular issued by the Proprietor of some Turkish Baths at Southport, at the conclusion of which it is stated that "Dr. ———, a Member of the Royal College of Physicians, Author of the 'Handbook of Southport,' has given particular attention to the subject, and will continue to advise as to its use in cases of doubt. Where the applicants' circumstances require, he will be glad to advise gratuitously." If this announcement is made with the knowledge and consent of this Member of the Royal College of Physicians, we think that he has transgressed the strict rules of professional decorum.

Ruptured Artery.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A "Foreign Subscriber" who asks for references to cases of "ruptured artery without laceration of integuments," will find a very exhaustive paper by Mr. Alfred Poland, of Guy's, embracing what he wants in "Guy's Hospital Reports" for 1840, page 281.

I am, &c. W. A.

Practice in India.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Can you tell me in your Notes, Queries, and Replies, whether the fact of Registration in England is sufficient qualification for practising as a Surgeon at Calcutta, or any other part of India, of course in an entirely civil capacity? I am, &c.

November 27. EQUATOR.

[Quite sufficient.—ED.]

Curtis's Ergot.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—If your Correspondent of November 23 will take the trouble to look into Morrell's Ainsworth's Dictionary, or Pliny, he will find Liq. Secali Cornuti is not incorrect. I am, &c.

13, Lansdowne-terrace, November 27. P. COOKE.

Suggestions for Improvement.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have one or two very trifling suggestions to offer you.

1. In the "Reviews" of books it would be a convenience to your country readers to give in every case the name of the publisher as well as that of the town where it is published. At present it is not your custom to do so. When a Medical man orders a Medical book of his bookseller in any country town, the latter nearly always asks for the publisher's name.

2. It would likewise, I am sure, be a welcome piece of information to have the price of the reviewed book given in each case. On reading the review of a book, one sometimes feels inclined to purchase it, if one only knew the cost. I am aware that by turning to the Advertisement Sheet one can generally ascertain the price; but the review of the Book and its advertisement do not always occur in the same number. Your object, I presume, is to make your paper as useful as possible to casual as well as to regular readers.

3. At present the very acceptable little paragraphs in leader type, which make up the week's news, have no headings. It is true the headings are given *en masse* in the epitome of contents on the first page; but would it not be better to repeat them, and so give each paragraph its own heading, so that a reader may see at a glance what each paragraph is about? Great numbers of your readers are men who have only time to skim rapidly through your Journal, perhaps jolting along in their carriages, and they feel the want of a heading to catch the eye. It might be printed in heavy, not large, capitals. I am, &c.

November 16. E. G.

[We insert this friendly letter in the hope that it will induce others of our readers to favour us with any suggestions that may occur to them for the improvement of our next volume. Those above suggested will be acted on from the commencement of the New Year.—ED.]

Licence of the College of Physicians.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A writer in your last week's number, signing himself "Sigma," complains of the imperfect manner in which the new Licentiateship of the College of Physicians appears to be known. Without saying anything as to the value of the new Licence, it may perhaps be some satisfaction to "Sigma" to know that it is not absolutely essential for a man to possess the L.A.C. in order to become a Candidate for an Hospital Appointment.

The present Assistant House-Surgeon at the Chester Infirmary (M.D. St. Andrews) does not possess the L.A.C. diploma; and I believe I am right in saying that at Manchester, the rule as regards the L.A.C. is not strictly adhered to. I am, &c. A READER.

Chester, December 1.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I remark in the *Medical Times and Gazette* of last week a letter from a correspondent, complaining of the fact that the Licence of the College of Physicians does not admit him to the office of House Surgeon in any Provincial Hospital.

Some months ago, at the request of my colleagues of the British Royal Infirmary, I wrote on this subject to the Staff of every Provincial Hospital, containing 100 beds and upwards, suggesting that any alteration in the Rules on this question should be made by all the Provincial Hospitals in the kingdom at the same time.

To these letters, 36 in number, I have as yet received 15 replies, and of the 15 only three are in favour of admitting the L.R.C.P., or indeed any Medical diploma, to the same advantages as the L.S.A. The difficulties that meet us are twofold:—

1. The Society of Apothecaries only admit to their Examination students from an Hospital to which one of their Licentiates is attached.

2. The question of apprentices. Most of the Faculty of the various Hospitals deem apprentices necessary to the due working of the Institutions.

The Faculty of Addenbrooke's Hospital, Cambridge, of the York County Hospital, and perhaps also at the Sheffield General Infirmary, seem disposed to admit to their resident offices, men who are registered Medically and Surgically, whatever their diploma may be. Of course we cannot expect the Society of Apothecaries to modify their rules, especially when, as in the present case, their very existence may depend on certain of these rules being strictly enforced; but I am daily regretting for the students of our Medical School in this city, that the present anomalous position of the Licentiates of the College of Physicians with regard to posts of emolument is practically confining the benefits of the large views of the College within very narrow limits. I am, &c.,

1, Chesterfield-place, Clifton. EDWARD LONG FOX, M.D.

ON THE TREATMENT OF GOITRE WITH THE BINIODIDE OF MERCURY OINTMENT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The *Medical Times and Gazette* of Saturday, November 30, contains a Report of the Treatment of Goitre, by E. M. Grenhow, Esq., Brevet-Surgeon H.M. Indian Army, stationed at Segowlee, India, from the perusal of which I am induced to offer my testimony to the efficacy of the binioide ointment in goitre. For about twelve years I have been in the habit of prescribing it. My plan, hitherto, has been of having it freely rubbed in the part, night and morning, after each application the enlargement was covered by oiled silk, in a few days the full effect is produced, when the biniodide ointment is laid aside and simple spermaceti ointment and oiled silk substituted. If the enlargement is not thoroughly dispersed, the same mode of treatment is resumed until the results are satisfactory.

I have never seen any injurious effects from the use of this ointment, but on the contrary have always had every reason to be satisfied with the beneficial effects. The proportions I usually apply are biniod. hydr. ℈j., auxungiæ ʒj., in some rare cases it has been requisite to use it stronger.

I am, &c.

Hexham, December 2. THOMAS STAINTHORPE, L.R.C.P. Edin., &c.

CODEIA.

We have been requested to publish the following extracts from a letter written by Dr. Aran to M. Berthé.

"I have at present only employed this alkaloid to obtain ease or sleep, but from ten or twelve cases I have been able to discover in this agent sedative and narcotic properties, which appear to me to place it in the first rank among the best remedies of this kind.

"Inferior to morphia for calming pain for this reason only, that a larger dose of it is required, it has a marked superiority over morphia, in that it never occasions a heavy and agitated sleep, that it does not bring on perspiration or eruptions of the skin, nor troubles the digestion, that it produces no obstinate constipation, no desire to vomit nor vomiting, no anæmia; so that the Codeia appears to me destined to be of great service in nervous diseases of the stomach, and I can assure you that we have obtained with it a relief in cases of gastrodynia, which had defied all other means, belladonna included.

"But it is especially as a means of procuring a calm and restoring sleep that the codeia seems to me called to occupy an important place in therapeutics. Those stubborn and harassing coughs of bronchitis, and particularly of consumption, those violent pains of rheumatism, gout and organic affections, of cancer, for instance, which disturb the sleep and frequently deprive the patients even of moments of repose, are forgotten in the midst of the calm and agreeable sleep, which the codeia procures.

"I have witnessed two very conclusive cases of incurable cancerous tumours, for which no means of relief at all lasting had been found. One of these tumours, of an enormous size, almost filled the pelvis and produced on the passage of the sciatic nerve pains returning about eight o'clock p.m. with such an intensity as to force cries from the patient, who only became calm towards the morning when she fell asleep overcome with fatigue. Two centigrammes of codeia (a) produced the first day a calm so complete that the patient thought herself cured, and for the first time since a month she was able to take a somewhat copious meal, her appetite having returned for the first time.

"During the twelve days I attended this patient, the pains were almost nul, and as soon as they reappeared she mastered them by a few centigrammes of codeia; it became, however, necessary to increase the dose by degrees, and from two centigrammes the patient increased the dose to ten centigrammes.

"To explain how so small a dose produced a calm so complete, I must add that her weak state rendered her very sensitive to the action of codeia, which, on the other hand, appears to me able to be given from the first in a much larger dose than morphia. The dose of five centigrammes of it in the syrup, for example, we have seen calm the pains of gastrodynia without leaving the slightest trace of narcotism, and one of our patients takes at present every day fifteen centigrammes of codeia without any bad effect.

"This patient, who has long made use of opium and morphia, established between these agents and the codeia a difference quite to the advantage of the latter which does not agitate her at all."

CITY ORTHOPÆDIC HOSPITAL, HATTON GARDEN.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Our attention has only just been drawn to a copy of your Journal, of November 9, in which you reprinted a letter that appeared in the *Times* on November 6, from a Correspondent of that journal who signed himself "L," and dated his letter from Constantinople on October 20, to which reprint you appended certain Editorial remarks prejudicial to this Charity, no doubt in the belief that the statements contained in that letter were true; as the Honorary Secretaries of the City Orthopædic Hospital we replied to that letter as well as to a second on the same subject, but the Editor of the *Times* has most unjustly declined to publish it. As you have reprinted the first of the letters, viz., that signed "L," we trust you will enable us to lay the matter fairly before your readers by publishing the reply, a copy of which we now append:—

(a) One centigramme is equal to one-sixth of a grain.

"City Orthopædic Hospital, Hatton Garden,
"November 12, 1861.

"To the Editor of the *Times*.

"Sir,—Your Correspondent 'L' has drawn an amusing picture of his imaginary vexation at not finding himself appointed 'Envoy Extraordinary to the Gaboon, for the purpose of sifting the great Gorilla question.' Whether he is a fit person to sift such a question, seeing that it relates entirely to the veracity of an author as to dates, etc., your readers shall judge for themselves after perusing the following statement of facts.

"It is quite true, Sir, that Earl Russell is about to preside at the Anniversary Dinner of the City Orthopædic Hospital on the 20th inst., and it is also true that his lordship most kindly wrote a letter for the express purpose of its being lithographed and circulated in order to induce those who were blessed with wealth and possessed the heart to use it in a cause of charity to aid in the support of an Institution which his lordship had satisfied himself was deserving of support and of which he was one of its Vice-Presidents. His lordship's intention is well expressed in his letter, of which the following is a copy:—

Foreign Office, October 18, 1861.

Having been requested by the Council of the City Orthopædic Hospital, Hatton Garden, to take the Chair at the Annual Festival of that charity on Wednesday, November 20 next, I cheerfully comply with the desire thus expressed. I shall be much pleased if benefit shall be derived thereby to that Institution and hope it may be convenient to you to attend on the day named. I have the honour to be

Your obedient servant,

Russell.

"This letter was not written by Earl Russell before October 18, which date it bears, and it was not out of the hands of the lithographers (Messrs. Day and Son) until October 24, and now as such are the facts as to dates, I ask you and your readers how 'L' could possibly have received it at 'Constantinople, *via* Paris and Vienna,' and replied to it from that place on October 20, viz., four days before it was out of the hands of the printers.

"As it is thus absolutely impossible that 'L' could have received Earl Russell's letter at Constantinople before it was lithographed and posted in Loudon, it is hardly worth while to comment on the sum 'L' says he paid for postage, viz., 15s., as that statement, like the former, must be a myth.

"But, Sir, we begin to suspect that the letter of 'L' was written as a hoax by one whose love for the humorous exceeded his estimation of the truth and who was regardless of the injury he might do to a public charity labouring to find the means of support, provided he could only enjoy the joke."

In conclusion, we beg to hand you, also for publication, a letter from Messrs. Day and Co., which places the matter beyond dispute.

We are, &c.

TIM. POLLOCK, M.D.,
City Orthopædic Hospital, Hatton Garden, GEO. A. LLOYD.
December 4.

COMMUNICATIONS have been received from:—

Dr. CONOLLY; Dr. AITKEN; Dr. SCOTT ALISON; Dr. CHAMBERS; Dr. COTTON; Dr. LEARED; Mr. A. TODD; Dr. BURTON; Mr. LE GROS CLARK; Mr. PEMBERTON; Dr. PAVY; Dr. DRUITT; Dr. KIDD; Mr. J. HUGHES; REGISTRAR-GENERAL; Dr. POLLOCK; Mr. STAINTHORPE; Dr. FOX; Mr. VINCENT; Mr. DRAKE; Dr. DEVENISH; Mr. WHEATLEY; Mr. SELF; Mr. FURBER; and Mr. MANN.

APPOINTMENTS FOR THE WEEK.

December 7. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

9. Monday.

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

MEDICAL SOCIETY OF LONDON 8½ p.m. Dr. Cockle, "On Some Points Connected with the Past and Present History of Diabetes; and on a less common form of Death in this Disease."

10. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8 p.m.—Ballot. 8½ p.m.—Mr. Nunneley's "Case of Successful Removal of the Tongue for Cancer."

11. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 7½ p.m.—Council. 8 p.m.—Mr. Solly, "On the Importance of Blood-letting in the Treatment of Disease."

SOCIETY OF ARTS, 8 p.m. Meeting.

12. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

CHARING-CROSS HOSPITAL, MEDICAL SOCIETY, 8½ p.m. C. W. Heaton, F.C.S., "Diffusion."

13. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday next:—

By Mr. Fergusson—Lithotrity; Closure of Urethral Fistula.

On Monday, December 9, by Mr. Bowman—Plastic Operation of Eyelid.

BY HER MAJESTY'S ROYAL LETTERS PATENT
AND BY SPECIAL APPOINTMENT TO HER MAJESTY
AND THE ROYAL FAMILY
THE EMPRESSES OF RUSSIA & FRANCE &c. &c.

JOHN WARD

5 & 6, LEICESTER-SQUARE, LONDON.

No. 12, Ward's Patent Albert Lounging Chair, the most simple and luxurious extant, is fitted for the Drawing Room, Boudoir, Cabin, or Camp; is made in Wood, Iron, or Brass, and folds into a small compass for shipment. From 4½ Guineas.

No. 17, a Four-wheel Victoria Pleasure-ground Chair, mounted in a very light Iron-framed Carriage, upon C and patent India-rubber Springs, is either drawn by Hand or Animal, and is the most elegant and easiest Chair made.

No. 16, a ditto, upon three wheels, mounted same as four wheels, on C and India-rubber Springs.

No. 19, a Bath Chair, with Leather Head, and Folding German Shutter.

No. 18, a Sofa Britska Spinal Carriage, with the inside Tray made to take out and in, on which an Invalid may be taken from her room to the carriage.

Nos. 10, 10, sketch of Earl's General Invalid Couch or Bed, made with or without a Convenience; it adjusts the back seat and legs to any given position by means of machinery, and is recommended by the Faculty as being the most complete Bed ever made for confirmed Invalids, or for Fractured Limbs.

No. 11 is Ward's Patent Reclining Chair, with Shifting Elbows for more easily getting on and off the Chair when the leg-rest is drawn out, as shown in the drawing.

No. 7 is an elegant Patent Recumbent Chair.

Nos. 13, 13, is a Couch-Chair or Bed invented by Dr Hester, and may be placed in any position by the Invalid without the assistance of a second person.

Nos. 2, 3, and 4, are all Self-Propelling Chairs, upon he best and most scientific principles; either may be used by a child eight years of age with perfect ease.

No. 24, Ward's Improved Child's Perambulator, with Patent Parasol. A variety always on hand.

No. 8, Ward's Improved Operating Dentist Chair, suitable for a Child or Adult.

No. 14 is the simplest and best-constructed Chair for carrying Invalids up and down stairs, the lower handles for level ground, the upper ones for ascending or descending a staircase: the sketch conveys the exact idea: it is also made portable for travelling. Several other kinds are always in stock, upon various principles.

N.B.—The largest Assortment in the World of INVALID CHAIRS, CARRIAGES, CRUTCHES, and BEDS always on hand, for Sale or Hire. Established more than a Century.

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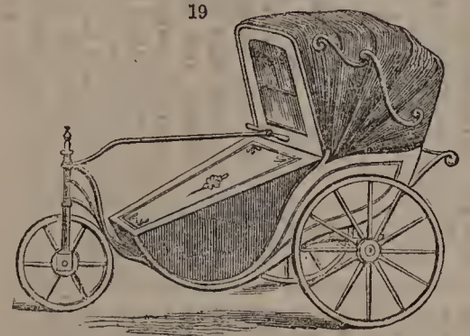

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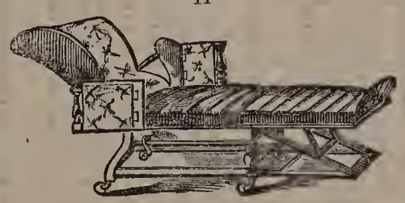

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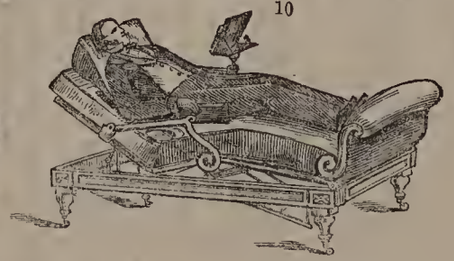

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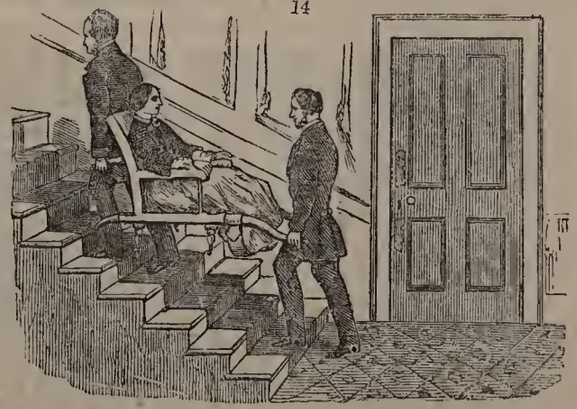

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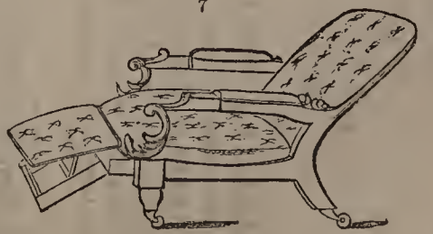

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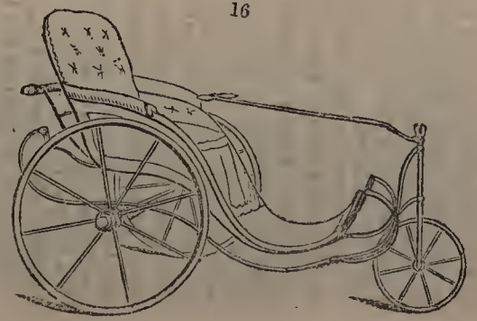

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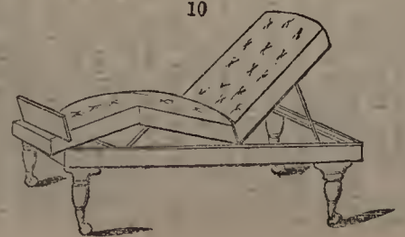

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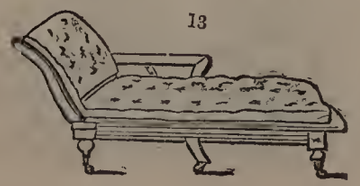

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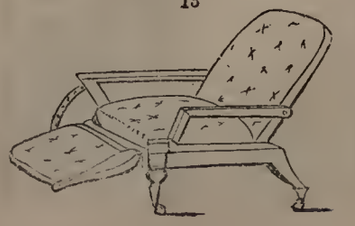


ORIGINAL LECTURES.

LECTURE
ON
SOME REMEDIABLE CAUSES OF STERILITY.

DELIVERED AT THE
SAMARITAN HOSPITAL
FRIDAY, MAY 31, 1861,

By T. SPENCER WELLS, F.R.C.S.
Surgeon to the Hospital, Lecturer on Surgery at the Grosvenor-place School.

GENTLEMEN,—It has been stated, and repeated with some authority, that of eight marriages solemnized in this kingdom, seven are fruitful and one sterile; and that, of the seven fruitful marriages, only four are followed by a birth within eighteen months after marriage. I have made inquiry, and I cannot find that there are strictly reliable grounds for these statements. Indeed, Dr. Farr has informed me that the only manner of obtaining such information would be by procuring a series of reports from Medical men. Yet, if not statistically accurate, common observation shows that this statement is probably a near approach to the truth, at least as regards the educated classes. I once went over a list of all my married patients and visiting acquaintance, and found that more than one in eight couples were childless; and I venture to say that if you take the married men present to-day, or at any large dinner party, or at a Medical Society or other considerable assembly, or jot down the names of your married friends, you will find at least one in eight to be without children. Dr. Simpson says:—"Many years ago, in investigating the subject of the alleged comparative sterility of females born co-twins with males, I had occasion to estimate the proportion of barren women among ordinary married females in general society, and I found that about one in every ten was sterile." He endeavoured to discover what was the average proportion of productive and unproductive marriages in general society, and obtained returns from Grangemouth and Bathgate, towns representing, one a population principally seafaring, the other agricultural and manufacturing. In the seafaring town, Grangemouth, of 202 marriages, 20 were without issue, or 1 in 10½. In Bathgate, of 455 marriages, 45 were without issue, or 1 in 10⅕. Dr. Simpson also examined the records of 503 marriages of British Peers, given in Sharpe's "Peerage," for 1833. Excluding 8 in which the age of the husband at marriage exceeded 56 years, 495 remain, and of this number 81 were unproductive, or 1 in 6⅛. The total result is, 1252 marriages, of which 146 were without issue, or 1 in 8⅗, not very far from the common estimate. Say, if you please, that this is a loose way of examining a statistical question. I admit that it is so. Still, for the want of more reliable data, it has its use, and it will convince you—whatever you may think of the one in eight ratio—that the proportion of sterile to fruitful marriages is very large, and you will see at once how much anxiety and unhappiness may arise from this circumstance, and how important it is that the causes of what must be regarded as an unnatural condition should be discovered, and, if possible, removed.

I suspect that there are few of us who estimate fully the amount of family unhappiness and immorality which arise from sterility. The wife yearning for a child's love remains with all her fond maternal instincts ungratified, and too often expends in a life of expensive frivolity those powers which would otherwise have been devoted to making her own home a happy one. With the self-abnegation of her sex she may restrain every expression of her feelings, but the husband is generally less considerate. He makes no secret of his disappointment, and frequently finds, in the endearments of the children of some mistress, what he cannot find in his own childless home. In two of the divorce cases which have recently been made public, this plea was urged and apparently in good faith The adultery of the husband was palliated by the sterility of the wife. The adultery of the wife was palliated by her desire for offspring, and the hope through the child of regaining the lost affection of her husband. And these are but two of the numerous histories which men in large practice in this great city could tell, were they at liberty to do more than speak in the most general terms of the disappointment, the loss of property, the loss or diversion of hereditary titles, and the general unhappiness which attend childless marriages. I have said enough, I hope, to convince you that if we can discover and remove the cause of so much that is to be lamented, we shall attain one of our highest objects—we shall do good and help to make the suffering happy.

Now, I think we may take it for granted that the *sterility* of the wife is a far more frequent cause of unfruitfulness than the *impotence* of the husband. A man who has reason to doubt his virility very seldom marries; and it is but rarely that a marriage is not consummated on account of the impotence of the husband. There doubtless are cases in which some abnormal conformation, or some disease of the male organs, or certain physiological conditions, may render a man who is not impotent incapable of fecundation. The semen may contain no spermatozoa,—or the spermatozoa may be dead or imperfect,—or the semen, instead of being ejected at the close of the act of congress may regurgitate into the bladder,—or may escape by a urethral fistula or opening. But such cases must be very rare indeed compared with those in which a woman, though apparently perfect, is sterile.

Just reflect for a moment on the small share of the male compared to the female in the process of generation. The male has simply to place within the receptacle of the female a certain quantity of normal semen. The female, on the other hand, not only has to receive this semen in a normal receptacle, but she must convey it, unaltered by admixture of unhealthy fluid, along the canal of the cervix uteri to the fundus, and then along one or other Fallopian tube to the ovary, at a time when the uterus or the tube contains an ovum ready for impregnation, or when an ovum is just ready to escape from one of the Graafian vesicles. Reflect for a moment on the complexity of this wondrous process. Month after month the ovaries prepare an ovum within a Graafian vesicle—when the ovum is mature the vesicle bursts, and the ovum escapes from it through the coat of the ovary, and through an opening in its peritoneal covering. This rupture must correspond with such an embrace of the ovary by the fimbriæ of the Fallopian tube that the ovum is received into the tube. The ovum is carried along the tube to the uterus, and if it meet with no fecundating spermatozoa on its passage, it is carried away in the menstrual fluid, which is the ordinary accompaniment of the periodical evolution of the matured ovum.

Therefore, if the ovary does not prepare mature ova—if anything prevent the escape of the ova when mature through the coat of the ovary—if, when the ova are ready to escape, the fimbriæ of the tube do not clasp the ovary—if the ovum is not carried along the tube uninjured—if it do not meet, either upon the ovary, or in the tube, or in the uterus, with the fecundating fluid of the male—the phenomena of ovulation have ended in simple menstruation—which (as Baudelocque said) is nothing but a periodic abortion.

I need not tell you, gentlemen, that this is not mere speculation. You know well that it is *fact*, proved by the repeated and careful observation of modern physiologists, of whom Martin-Barry and Newport well sustain the claim of this country for a large share in the honour of the discovery. To one of Barry's friends and co-labourers here present to-day I am indebted for the opportunity of enabling you to satisfy yourselves that the ova may be seen passing along the tubes to the uterus, and that the spermatozoa from the male really do perforate the ovum.

The human ovum has been seen in the Fallopian tube of more than one woman who has died at her menstrual period; but we are fortunately not driven to any such a search as this to demonstrate the fact. In the human female the rule is that only one ovum is discharged monthly; but in the rabbit the evolution is constantly going on, and we have only to kill a doe at heat to be able to show ova in these passages. If the doe be killed within a limited interval after congress with the buck the impregnation of the ovum by the spermatozoa may be seen, as it was seen over and over again by Barry, not only in the uterus and in the tubes, but also upon the surface of the ovary. The two doe rabbits on the table were killed half-an-hour ago. They were at heat, and you see here in one Fallopian tube an ovum, just like a grain of well-boiled sago, half way between the fimbriæ and the uterus. Here on one ovary is one distended Graafian vesicle which has just ruptured. On the other side there is another distended, prominent, and ready to burst; while

in this other rabbit a vesicle which has burst is seen to be filled with blood, and the ovum is still loose upon the surface of the ovary. So that in these two rabbits you may see, without the aid of any lens, the enlargement and rupture of the Graafian vesicle, and the ovum which has been discharged.

In the fresh-water mussel it is not uncommon to see a spermatozoon actually perforating the ovum through the opening in the shell and membrane, called the micropyle; this micropyle may be seen very clearly in the ova of many fishes. Here I can show you the aperture in ova just removed from one of these mussels; and those who are fortunate enough to hit upon the happy moment, may see sticking in this micropyle a spermatozoon. Keber says he has repeatedly seen this, and so has Dr. Webb, who published his account in an Edinburgh Journal some five years ago.

Again: if a cat be killed, and the *ascaris mystax* be found in the intestines of the cat, both males and females may be observed. Cutting off about a quarter of an inch from the tail end of the female worm, and beginning to make a little pressure from the neck towards the tail end, uterus and ovaries are pressed out with the oviducts containing ova in all stages of development, from the egg-stalk and miniature ova upon it, down to ova which have been impregnated with the curious club-shaped bodies which form the essential elements, or spermatozoa, of the seminal fluid in this creature. You see all this in the specimen before you, and nearer the uterus you see the ova beginning to divide, showing that impregnation has taken place; while in the uterus you have the ascaris fully developed inside the egg. If you are successful in hitting upon the right moment of observation, you may see the solution of that side of the ovum which is in contact with the spermatozoon.

This is not the place to enter upon the questions so interesting to physiologists as to the exact modes in which impregnation—in other words, the contact of the spermatozoa with the vitellus—is effected; although I may remind you that the contact is brought about in four distinct modes in different species of animals:—1. The spermatic filaments penetrate the egg-covering. 2. They penetrate through micropyles. 3. They penetrate the vitellus before the membranes of the egg are deposited; and 4. Premature dissolution of the vitelline membrane allows of the contact. After the spermatic filaments have penetrated by either of these modes, they gradually dissolve. What further becomes of them we do not know; but if we reflect upon the close similarity which exists between the ova of all species of animals, and at the same time upon the great diversity in the form of the spermatozoa, we shall be disposed, with Professor Owen, to look upon the spermatozoa "as the essential principle upon which the difference of character of the species will depend; and at the same time regard the ovum, like the seed of the plant, as the mere nidus in which the necessary changes are effected, rather than as containing within itself all the parts essential to its perfection." These speculations, however, carry us far beyond my purpose to-day, which is simply to strengthen your impression that impregnation depends upon immediate contact between the vitellus and the spermatic filaments, and that as anything which interferes with this contact may give rise to sterility, this defect may depend upon any of the following causes:—

1. The ovaries may not perform their normal function of periodical ovulation: in other words, there may be no ova prepared for impregnation.

2. Alterations in the coverings of the ovary may interfere with the escape of the ovum.

3. The ova may escape from the ovary, but may not be grasped by the fimbriæ. They may often be seen adhering to neighbouring portions of loose peritoneum. Here they generally perish, or die away just as they do in the uterus when not impregnated; or if impregnated, then we have extra-uterine fœtation.

4. Alterations in the Fallopian tubes may obstruct the passage of the ovum from the ovary into the uterus.

5. Alterations in the uterus, or in the vagina or external organs, may prevent impregnation of the ovum (1), by preventing access of the spermatozoa to the ovum, (2) by destroying the spermatozoa by admixture with abnormal fluids, or (3) in some other way interfering with the physical conditions of fecundation.

Now, there can be no doubt whatever that under the first head I might consider many remediable causes of sterility. By judicious treatment restoring the menstrual function from an abnormal to a normal condition, we may restore the process of ovulation (of which menstruation is but the "outward and visible sign") also to the normal condition. We can recognise and treat successfully inflammation of the ovaries, and some cases of local peritonitis, possibly preventing such adhesions between the fimbriæ and the ovaries as may prevent the discharge of the ova. And by a proper combination of hygienic, moral, and medical treatment we may restore the general powers of the system to the healthy standard. But all this I must pass over to-day—first, because the subject is far too wide for a single lecture; and secondly, because I think our time may be spent more profitably by confining our attention to the fifth class of causes, and inquiring how we can remedy those conditions which impede the free access of spermatozoa to the ovum.

In carrying out this inquiry I may refer you to the following table in which these causes are arranged in progression from without inwards:—

Occlusion of Vagina { By adhesion of labia / By imperforate hymen.
Vulvular Folliculitis—Herpes and Eczema of the Vulva.
Hyperæsthesia and Anæsthesia of the Vagina.
Diseases of Rectum, Urethra, or Bladder.
Ruptured Perineum.
Vaginal and Uterine Leucorrhœa.
Uterine Catarrh, Congestions, and Inflammations.
Displacements of the Uterus.
Contractions of the Os and Cervical Canal.
Dysmenorrhœal Membranes.
Foreign Bodies in the Uterus.
Organic Diseases of the Uterus, as Polypi, Fibrous Tumours, or Cancer.

Now I need not do more than allude to several of these causes of sterility. A mere glance at the table is all that is necessary to remind you that if you have a malignant or a fibrous tumour of the uterus to deal with, your patient is not very likely to go on to the full term of pregnancy, although impregnation not unfrequently takes place under such circumstances. If a uterine polypus be discovered, I need not tell you that it must be removed; but I may just remind you that small vesicular polypi of the cervical canal are often overlooked.

It is not very often that foreign bodies will be found in the uterus; but one case was a good deal talked about when a lady was assured that she was pregnant, although she was wearing one of Dr. Simpson's intra-uterine stem pessaries to correct some flexion. Any version, flexion, or prolapse of uterus which you may discover in a sterile woman you would of course correct. If any disease of rectum, bladder, or urethra, render congress painful you would naturally treat these conditions—divide an anal fissure—remove a urethral caruncle, or a foreign body from the bladder. Any excessive sensibility of vulva or vagina would be removed by allaying follicular irritation (cleanliness, and bichloride of mercury lotion), by astringent injections, lead and zinc suppositories, or the use of cylindrical air-pessaries. Any vaginal fissure would be divided. Any neuromatous points destroyed by nitric acid or the galvanic cautery. If the hymen, or the carunculæ myrtiformes, were found in a congested irritable condition, they should be removed; adherent labia separated, and imperforate hymen divided. This last remark may appear almost superfluous, but only the other day I heard of a case in which the hymen was found imperforate in a lady who had been married thirty years, and who, when the discovery was made, was past the age for child-bearing. Dysmenorrhœa attended by the formation of false membranes must be treated on general principles, so also leucorrhœa, whether uterine or vaginal. Do not suppose that because I pass over dysmenorrhœa and leucorrhœa in these few words, that I underrate their importance; for I am convinced that they are very frequent causes both of sterility and abortion. And so are various uterine affections (which may be very easily cured when once discovered) quite sufficient to become causes of sterility, either by preventing impregnation, or by converting the uterus into an imperfect receptacle for the impregnated ovum. Such are the erosions and excoriations of the mucous membrane of the cervical canal and the lips of the os uteri which may be seen in our out-patients' room any day; and such, though less easily cured, are the equally common conditions described as hyperæmia and hypertrophy of the vaginal portion of the cervix, and the various forms

of metritis and uterine catarrh, which may be considered as among the most common of the remediable causes of sterility. But it would require a whole lecture to discuss the treatment of these affections, and the time now remaining only permits me to consider one cause of sterility less generally recognised, and the treatment of which, though very successful, is less generally known,—I allude to contraction of the canal of the cervix uteri and the treatment by dilatation or division.

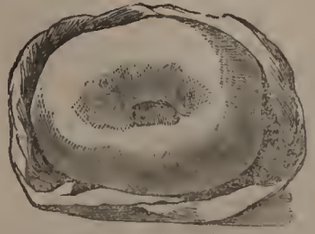
But before entering upon this subject, allow me for a moment to direct your attention to one of the causes of sterility given in the table before you, which may strike you as odd—rupture of the perinæum. A woman may be practically sterile who has borne a child. I have known such a case. A lady in her first confinement was delivered by forceps; the child was still-born, and she suffered a fearful laceration of the perinæum quite through the sphincter into the rectum. She entirely lost control over her motions; prolapsus of the uterus, anterior wall of vagina, and bladder came on, and for twelve years she lived separate from her husband. It was only by accident in conversation with him that I heard of her state, and was able to assure him of the ease and safety with which the perinæum might be repaired and his wife be restored to a condition to bear children.

Having thus rapidly glanced on all the other conditions enumerated in the table, we will devote the remainder of the hour to one of the most frequent and one of the most easily remediable causes of sterility, namely occlusion or stricture of the os uteri and the cervical canal, and the mode of remedying it by dilatation or division.

Contractions of the os uteri and cervical canal have been enumerated among the causes both of dysmenorrhœa and of sterility since the days of Hippocrates. More than 2500 years ago we are told in the Γυναικεῖων Πρῶτον that where sterility is due to contraction of the os this must be dilated by leaden instruments. In the "Marrow of Chirurgery," by Cook of Warwick, published about 1660, we are told that when the os uteri is closed it should be dilated by gentian root or prepared sponge, or hollow instruments of silver, ivory, or horn, and these means, says Dr. Simpson, to whom I am indebted for this reference, Cook adds "are better than incision." In our own time, Dr. Macintosh, of Edinburgh, was the first to revive the mechanical treatment of the *clausura uteri*. He used metallic bougies, gradually increasing their size until No. 13 was passed, and in his "Practice of Physic" he says that of ten married women treated before 1832, "seven subsequently fell with child." After that year, he says he followed the practice in seven women, of whom "four have since had a child each."

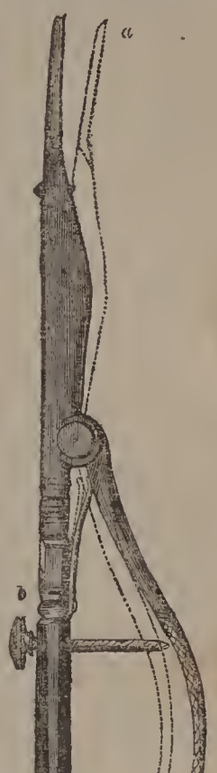
Women who have the outlet of the uterus contracted habitually suffer, as might be expected, from dysmenorrhœa. The menstrual fluid is secreted more rapidly than it can escape, it accumulates within the uterine cavity, distends it, and thus leads to the expulsive, paroxysmal pains of dysmenorrhœa. Therefore dilatation of the outlet, even if it do not remove sterility, often cures the dysmenorrhœa, as Macintosh noticed, and as I have since repeatedly observed.

It is to Dr. Simpson that we are indebted for a more "ready method" than the painful and tedious process of Macintosh. He had tried the dilatation by bougies, by Rigby's dilator, and by leaving his own stem pessaries for long periods in the canal, increasing the size of the latter every three or four days. But he says he frequently found "that when the dilatation was effected mechanically, and whether slowly by sounds, or rapidly by sponge tents, relapse of the stricture or contraction was very apt to occur after a time." This led him to think that the speediest mode of cure would be to dilate the os by an incision on each side. This idea was encouraged by the reflection that by this practice the uterus which has never contained an impregnated ovum is brought into the condition of the uterus of a woman who has

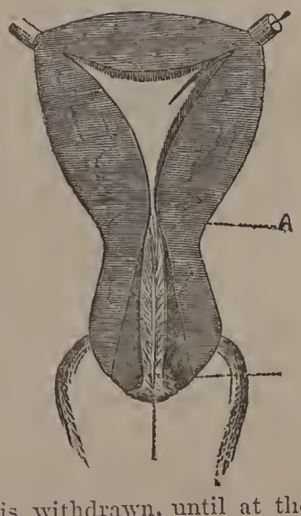


borne a child. These two drawings are copied from Dr. Simpson. The first is a sketch of the virgin os uteri—you see that it is small and nearly round. Now compare this with the os uteri of a mother. Instead of being a round

or oval opening, it is a long narrow slit, just such as you can make of the first by an incision on each side; but which you cannot make by bougies or dilating instruments, and which is not so likely to recontract as is a dilated circular opening. There can be little doubt that, as Dr. Simpson says, a "patulous condition of the os and cervix seems to admit of the more ready entrance of the spermatic fluid, and so to favour impregnation," and as little doubt that this is the correct explanation of the well-known fact that "the occurrence of pregnancy once, seems to bring the uterus into a condition favourable for its recurrence."



Here is Dr. Simpson's hysterotome or metrotome. This instrument he contrived for bringing the uterus of a woman who has never borne children into the condition of one who has done so, or who has miscarried. The blade *a* is protruded from the sheath by pressure on the handle, to an extent regulated by the screw, *b*. The instrument is introduced closed through the os, and passed along the cervical canal up to the os internum. It is done without any exposure of the patient, who lies in the ordinary obstetric position on her side. The extent of the incisions is best explained by this other illustration of Dr. Simpson's. It shows a section of the uterus, the entrance of the Fallopian tubes, the triangular form in the childless of the cavity of the fundus, the cervical canal, and the vaginal portion of the cervix. The dark triangular portion shows the extent to which the incision should be made, beginning quite shallow at the os internum, and being made deeper and deeper as

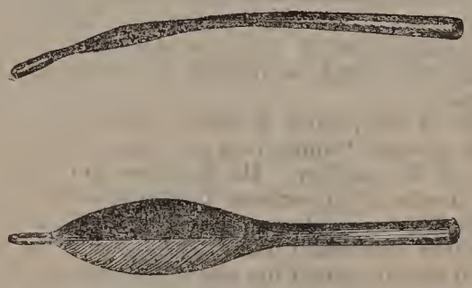


the instrument is withdrawn, until at the os externum the cervix is cut through on both sides nearly up to the reflexion of the vagina. Such an incision makes the canal of the cervix pyramidal in form, and wide enough to admit the finger; and after healing, the orifice resembles that of the os uteri of a woman who has borne children.

I should tell you that the blade of the hysterotome should be very sharp, or it will not cut through the uterine tissue. If sharp it does so easily and causes scarcely any pain. There is not often bleeding, unless the incision is carried too closely to the reflexion of the roof of the vagina. But it is well to guard against it in all cases, by plugging directly after the incision with a few small pieces of sponge. If there be any arterial bleeding of consequence, a piece of lint soaked in a solution of the perchloride or of the persulphate of iron should be applied before plugging. The tendency of the wound to heal by first intention should be checked by touching each end with nitrate of silver, and opening it up every two or three days with the finger until cicatrization is complete. Dr. Simpson has seen pelvic cellulitis follow the operation in a few rare cases. I have never seen this, although I have done it here in the out-patient room, and the patient has walked away; and I have done it in my consulting-room for patients from a distance. But I need not say that it would be advisable to secure quiet for a day or two when it can be obtained.

In illustration of the results of this operation in the cure of sterility, I had intended to bring before you the details of many cases in which impregnation followed so soon after the operation that no reasonable doubt could be entertained as to the relation being that of cause and effect; but the hour is so nearly gone that I must be content with assuring you that I can quite bear out from my experience, both in Hospital and private practice, Dr. Simpson's assertion that "there are few operations in Surgery so perfectly simple in their performance, and so entirely satisfactory in their results, as division of the cervix uteri in cases of obstructive dysmenorrhœa and sterility." It is particularly satisfactory that even if sterility continue, the patient is cured of her dysmenorrhœa; and many patients have told me that this gain has added immensely to their happiness; for two or three days before and during the menstrual period they were always ill, for a week afterwards they were only recovering from the effects of their suffering, and the rest of the month was embittered by anticipations of the ever recurring misery.

I have seen patients upon whom this operation has been very imperfectly performed. The os externum and vaginal portion of the cervix have been freely divided, but the os internum and upper part of the cervical canal have remained so contracted that even a probe could not be passed; and I have myself seen cases in which Dr. Simpson's instrument could not be passed up to the os internum. In such cases a probe-pointed knife, contrived by Dr. Coghlan, of Wexford, answers the desired purpose extremely well. I show you this knife. It is mounted on a long handle, and the cutting part



is easily guarded during its introduction by the pulp of the forefinger. The probe-pointed portion is about the size of a No. 1 bougie; guided by this point a perfectly central incision is readily carried along up to the uterine cavity, and by varying the breadth of the cutting portion an incision of any width can be made. Dr. Coghlan keeps the wound open by means of a tube of thin sheet lead until cicatrization is complete. I prefer Dr. Simpson's hysterotome in cases where it can be introduced up to the os internum; but when this cannot be done, Dr. Coghlan's proves very useful. An ordinary blunt-pointed tenotomy knife mounted on a long handle answers the purpose equally well when there is no objection to the use of the speculum. But whatever may be the instrument you use, if you relieve your patient from the constriction under which she has suffered, you will certainly earn her gratitude for saving her from all the periodical torture which accompanies obstructive dysmenorrhœa, and you may very probably be still more warmly thanked for changing a sterile woman into a "joyful mother of children."

ORIGINAL COMMUNICATIONS.

ON THE ACTION OF CERTAIN SUBSTANCES UPON PHTHISIS.

By RICHARD PAYNE COTTON, M.D.

Fellow of the Royal College of Physicians, London; Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

No. VII.—Steel. (*Vinum Ferri.*)

The following observations upon the action of steel, were made upon twenty-five in-patients of the Consumption Hospital. As in all my preceding experiments, I studiously avoided any selection of cases, and excluded only those in which the disease was obviously too far advanced to render any kind of treatment available, and those in which there existed some complication which would tend to negative the result.

Of the twenty-five patients ten were males and fifteen females. Six were in the first, six in the second, and thirteen in the third stage of the disease. Ten were under the age of 20, and the rest were between 20 and 40 years of age.

I selected the old *vinum ferri* as being the most simple of the many forms of iron, as well as one which is seldom objected to, and is rarely found to disagree. At the commencement I prescribed two drachms twice a-day, each dose being gradually increased to half an ounce, and in some few instances to an ounce. The treatment was continued for periods varying, according to the different cases, from four to thirteen weeks. In two or three of the female patients, the steel seemed to cause slight headache, which, however, generally disappeared when the dose was lessened or temporarily discontinued. During its use, the patients' appetites were usually very good, and there was not the slightest indication of increased liability either to hæmoptysis or any other active symptom of the disease.

Of the twenty-five patients, thirteen *greatly* improved; three *slightly* improved; and nine derived *no benefit;* of these, three died in the Hospital.

In thirteen of the cases cod-liver oil was occasionally but not regularly taken in conjunction with the steel; but in the remainder, no other medicine was administered except some simple linctus for the cough. Fourteen patients increased in weight—some of them very considerably; eight lost weight; and three remained unchanged in weight. Nine of the fourteen cases in which the weight increased were of those who had taken cod-liver oil. One of these patients, in the second stage of the disease, illustrated the remarkable but not very rare phenomenon, of increasing in weight, whilst both the local and many of the general symptoms of consumption were steadily advancing.

Of the thirteen patients *greatly* improved, several left the Hospital with their general health restored, and their active symptoms dissipated. Four were especially remarkable for the improvement they exhibited, being able, in spite of the unmistakeable existence of pulmonary cavities, to resume their several pursuits on leaving the Hospital.

Seven of the thirteen improved cases were under the age of twenty—a large proportion, if we consider the respective ages of the patients.

Perhaps I may here remark, that although I had not hitherto compared and tabulated the cases I have treated with steel wine, I have long been in the habit of prescribing this medicine, in conjunction with cod-liver oil, to phthisical and strumous patients, especially to children and young persons, and have always placed great faith in its efficacy. I have, indeed, always considered it amongst the most useful remedies in this class of diseases; and in this homage to the *vinum ferri* very many of my Medical brethren will doubtlessly join. That the remedy fairly deserves to be thus estimated, is, I think, sufficiently shown by the experiments I have detailed.

After I shall have recorded similar observations upon a few other substances which are now undergoing probation in my Hospital wards, I hope to give a general summary of their comparative results. And, although I am quite willing to admit that any conclusion at which I may arrive in the course of these experiments must necessarily be imperfect,

and at most but an approximation to truth,—considering that, in order to reach the actual truth, many insuperable difficulties present themselves, such as a want of uniformity in the cases, circumstances, and stages of the various patients, as well as in the season of the year, the diet, and a multitude of other circumstances,—it will, I think, be nevertheless conceded, that the trial to which I have subjected the different remedies is not altogether unproductive, and that on the present occasion steel wine comes before us very favourably as a medical agent in the treatment of phthisis. In order, however, to assimilate this paper with those which have preceded it, I would record the following conclusions :—

1. Steel wine is a very useful auxiliary in the treatment of a considerable number of consumptive patients.
2. It seldom disagrees, but tends rather to increase the appetite, and improve digestion.
3. It is especially valuable in the cases of children and young persons.

Clarges-street, Piccadilly.

CASE OF CIRCUMSCRIBED SLOUGH OF THE SKIN SUDDENLY APPEARING IN A CHILD WITH MUCH CONSTITUTIONAL DISTURBANCE.

By JOHN C. THOROWGOOD, M.D. Lond.

On September 25 last I was called to visit Charles B., aged six years, a patient of the St. Marylebone Dispensary, residing over a stable in some neighbouring mews.

I found the child in bed with a brown tongue, a sharp, quick pulse, and much irritative fever, at the same time he was evidently very weak and exhausted. My attention was at once drawn by his mother to the calf of the left leg, where was situate a very dark, almost black, irregular patch of skin about two inches long by one and a-half broad, having a clearly defined margin, on which were situate a few flat serous vesicles, the surrounding skin was of its natural colour and apparently sound and healthy.

The dark slough was firm and resistant, slightly sensitive, and exhaled no fœtor. The foot of this left leg was a little swelled, the inguinal glands not notably enlarged.

I was told that the child had been ill successively with measles, whooping-cough, and scarlet fever, this last having left him rather more than a month before the time of my visit. He had no dropsy after his scarlet fever, but he caught the chicken pox, from which he is now hardly recovered. About two weeks ago his mother noticed discoloration of the skin over the right knee, and asked the boy if he had been bruised there, he denied having received any injury, and soon this discoloration vanished.

The large slough on the left calf is said to have come four or five days before I saw the boy, in the following way,—his mother washed him all over in the morning, and he was sent out into the yard, about mid-day he was brought home unable to walk on account of severe pain and weakness in his legs, the left leg was the worst and was quite cramped and drawn up. On examining this leg, his mother noticed the dark patch on the calf looking then just as it looked when shown to me at my visit.

His mother is sure that when she washed him in the morning there was no redness or change of any kind in the skin of the left leg, she is also certain nothing has been applied that could cause such an appearance.

Under these circumstances I viewed the case as one of superficial slough of the skin arising in a weak and exhausted system, and I ordered him a free allowance of beef-tea and wine and a dose of the following medicine thrice daily :—℞ Ferri ammon. citrat. gr. j. ; potass. citrat. gr. x. ; aquæ ʒj. M. Ft. haust. ter die sum.

The slough was powdered with oxide of zinc and wrapped over with wool. The boy, though for some days very ill, gradually got better, and was soon able to leave his bed and walk out ; the slough very slowly separated, and by the end of October it had left a rather deep granulating wound which was dressed with red precipitate ointment and is now (November 18) nearly healed.

The point that struck me in this case was the rapidity with which (according to report, and I questioned most carefully in the matter,) the slough formed. The mother washed the boy all over in the morning and then observed no discoloration of the skin, at noon the boy was brought home, and on his leg was the patch already described.

The cellular tissue if inflamed or injured in a person of low vital power, is, we know, very ready to run into slough, and in this instance I believe the slough had its origin in a hæmorrhage from the enfeebled capillaries into the subcutaneous cellular membrane, and this exudation, by its pressure on the vessels and nerves, soon caused the death of the superjacent skin.

The hæmorrhagic form of erythema nodosum described by Mayr as appearing suddenly on the leg or arm of not very young children, I conceive might originate such a slough as the one here described.

The transient ecchymoses on the right knee indicated the hæmorrhagic tendency in the capillary system, and the length of time the slough took to detach itself, and the deep wound it left, showed that there was more mischief in the cellular membrane than I had at first thought, and during the process of separation a copious bloody discharge oozed from the edges of the slough as if from coagulated blood in process of disintegration.

The severe cramp-like pain felt at first in this case is a symptom that has been noted by observers in cases of slough or gangrene from obstruction of vessels ; and in a case of Nélaton's, where gangrene resulted from embolia of some of the larger arteries, this cramp-like pain was intense and persistent till death. The notice of Nélaton's case is in the Year Book of the Sydenham Society for 1860, p. 275.

Upper Seymour-street.

FIVE CASES OF LITHOTOMY.

By ARMSTRONG TODD, M.B., M.R.C.S.

(Concluded from page 576.)

The remaining three cases require but little description. One point may be mentioned which, in my opinion, has materially conduced towards their rapid recovery, and to their freedom from any bad symptom. In these cases I have taken particular pains, when cutting upon the staff, not to injure the prostate gland, and merely made a small slit in the urethra immediately in front of and up to this gland sufficient to admit of the finger being inserted and pushed into the bladder through the prostatic urethra. The dilatability of these parts renders this proceeding extremely easy, and comparing it with the system of passing the knife along the groove of the staff right into the bladder, cutting the prostate through, it must be less dangerous and more favourable to the after healing process. I am quite of opinion that, except where there is a large stone, it is unnecessary to cut the prostate gland, and not doing so renders the operation much less dangerous.

Case 3.—A boy, aged 6 years, suffered pain and other symptoms of stone "since ever he could remember," to use the words of his mother. He had been under Medical and Surgical treatment at various times, particularly during the last twelve months. Strange to say, he is the nephew of the patient before mentioned (Case 2) who, when he went home from the Hospital, visited his brother and found that his little nephew was suffering from the same symptoms as he had been, so he brought him to the Hospital on October 3, 1861. A small calculus was detected, and he was admitted into the Hospital on October 9, 1861. On October 14 I operated by the lateral operation; but, as I have above stated, took particular pains not to cut the prostate. I could feel this gland very distinctly when I inserted my finger, smooth and untouched. I removed a small rough stone from the bladder weighing fifty-six grains. 15th.—The report says he was doing remarkably well. 16th.—His tongue was clean; no fever nor pain. He thus continued to improve daily, and on the 24th the water came through the penis at 7 o'clock a.m., and twice afterwards during the day. 25th.—The water passed again through the wound. 26th.—Came again partly through the penis and partly through the wound. 27th.—All the water came by the penis ; none through the wound. November 3.—The wound was perfectly healed. 4th.—He sat up ; and he left the Hospital on the 13th.

Case 4.—A boy, aged 4½ years, was admitted into the Hospital for Stone on October 21, 1861. His father states that this child suffered from pain and irritation about the urinary passage for twelve months. On examination a small stone was distinctly felt, and on the 26th I performed the same operation as in the last case, taking the same precautions as regards the prostate gland, and removed a small stone, weighing 37½ grains. On the 27th he was going on as well as possible. 28th.—The wound did not seem to be granulating sufficiently, and a deposit of lithates appeared upon its lips. He was ordered quinine gr. j., and nit. dil. gtt. iij. aquæ ℥j., three times a-day, and a poultice to be applied to the wound. All these symptoms passed away. November 2.—The water passed through the penis; on the 4th all water came through the penis, none through the wound, and he daily grew stronger, and left the Hospital on November 22, 1861.

Case 5.—A boy, aged 6 years, was brought to the Hospital for Stone and other Diseases of the Urinary Organs, on October 30, 1861. His parents stated that he had suffered from the usual symptoms for three years. On examination a stone was felt, and he was admitted into the Hospital on November 4, 1861. His parents were very poor, and the boy seemed sadly neglected and out of health. He was at once put under treatment to improve his general health, and I performed the operation on the 15th, taking the same precautions as in the last two cases. The stone when removed weighed twenty-six grains. 17th.—He appeared very well, but he passed all his urine through the penis. At the operation a small vessel was wounded, but was easily controlled. On the 18th his skin was hot, pulse high, and no water had yet passed through the wound. He was ordered a hot bath, a poultice to be applied to the wound, and to have a powder, consisting of hyd. chlor. gr. ij., pulv. Doveri gr. v. November 19.—He had rather a bad night, the bowels were moved four times, and smelled very offensively; however, this gave him great relief, his skin became moist, and all the feverish symptoms abated. On the 20th he was very much better, clots of blood came away from the wound and through the urethra, and the urine flowed freely through the wound. He continued from this to progress favourably, and on the 26th the urine came chiefly through the penis. 27th.—No water came through the wound, which appeared almost healed, and his general health greatly improved. December 2.—He was permitted to get up, and seemed very strong. He left the Hospital perfectly recovered on December 7, 1861.

16, Old Burlington-street.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,
Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.
Assistant-Physician to the Metropolitan Free Hospital.

CASES OF PARALYSIS OF THE PORTIO DURA.

Paralysis of the portio dura is an affection not very uncommon, and well known as Bell's paralysis of the face. We shall give a few cases showing various causes of this affection. In all cases of paralysis of this kind there is some disease in the course of the nerve. It never, says Dr. Todd, arises from disease of the brain. Parts of it may be affected in disease of the brain, as in ordinary hemiplegia, but the orbicularis escapes, as those fibres of the nerve which supply this muscle do not go so high up in the brain as the others. As Dr. Todd says, paralysis of the orbicularis is a certain sign that the facial paralysis is due to injury to the *trunk* of the portio dura. Of course, this injury may be in that part of the course of the nerve which is either in the ear, or behind the angle of the jaw, or in the cranium. But in the last case it is due to some tumour, and not to uncomplicated disease of the brain. We shall give cases of each of these kinds of paralysis.

The first of our series is one in which a blow on the cheek inflicted such injuries to the nerve, either directly or by inducing compression of the nerve fibres by the swelling following the injury. The patient was discharged well. In another case there appeared to be a connexion with rheumatism, and probably the affection of the motor nerve was analogous to rheumatic affection of sensitive nerves, and not dependent on any organic injury to the trunk of the nerve.

Case 1.—*Blow on the Right Cheek producing Paralysis of the Portio Dura of that Side.*

[Reported by Mr. Swallow.]

Timothy W., a policeman, aged 21, was admitted into St. Thomas's Hospital, under the care of Dr. Barker, on October 1, 1860. A week before the patient was struck on the angle of the right jaw when taking a prisoner into custody. Two days afterwards, swelling came on over the whole side of the face, extending behind the ear. He could not open his mouth; he had soreness in the throat, and some difficulty in swallowing.

October 1.—The patient has considerable swelling of the right side of the face; he cannot open his mouth, complains of great pain in the lower jaw extending behind the ear; the part is hot and inflamed. The mouth is drawn to the left, and he cannot close the right eye. He has pain in the head; no appetite; has had several rigors during yesterday and to-day; bowels confined; pulse 75; tongue coated with white fur; breath hot and offensive. Dr. Barker ordered him an aperient. To have warm water dressing to the face. Milk diet and beef-tea.

October 2.—A pill containing a grain of opium and five grains of calomel was given at bed-time, to be followed by house mixture.

4th.—The swelling and the pain still continue; bowels opened; tongue cleaner; pulse 70. To apply eight leeches to the side of the face.

8th.—The leeches have relieved the pain. He can now open his mouth a little, and the swelling is less. The difficulty in closing the eyelids continues; pulse 70, full; tongue cleaner; was ordered poultices to the cheek.

14th.—Swelling much less, and pain less. He can move the jaw freely. To continue the poultices. Bowels to be regulated by house medicine.

19th.—Swelling almost gone. He can open the mouth without much difficulty. He was ordered full diet, and a mixture of three grains of iodide of potassium in an ounce of decoction of cinchona three times a-day.

31st.—No stiffness in moving the jaw; no swelling; the mouth is not opened in the median line, but is slightly drawn towards the left side. He has catchings in the upper and lower eyelids of the right side. Says he feels quite well.

November 2.—Discharged well.

Case 2.—*Paralysis of the Portio Dura occurring in Connexion with Rheumatism.*

A robust-looking man, aged 40, a labourer, was admitted into St. Thomas's Hospital, under the care of Dr. Barker, on November 12th. He had been ill one month, with flying pains in his legs, ankles, and shoulders; he ascribed them to exposure to cold. He first had shivering, then pain in his back, and in the knee-joint and shoulder. The pain would for a time affect a part, and then cease and go to another. He mentions also a feeling of numbness and pricking in his toes. The most noticeable thing, however, is complete paralysis of the right side of the face, the whole of the muscles supplied by the portio dura of the seventh nerve being completely paralysed. He had noticed the drawing of the face about a fortnight. When told to shut his eye, the upper eyelid falls a little, and the eye is turned up, so that the cornea is concealed by the upper lid, but he cannot close the eye. There is no pain in the right ear or face, and no impairment of hearing on this side was found after careful examination. He has pain in the forehead, but none in the face. There was no tenderness over the parotid. A blister was applied behind the angle of the jaw, and he took pot. iod. gr. v. ter die, until the 28th, and was then discharged much improved, both as regards the paralysis of the face and the pains in his limbs.

Case 3.—Suppuration in the Ear—Paralysis of the Portio Dura.

[Reported by Mr. Evans.]

John K., a strong, well-nourished man, a costermonger, constantly exposed to the weather, was admitted, under the care of Mr. Stanley, on October 17, 1861. He had, until the attack to be described, always been well. One month before his admission he caught a severe cold, which "chiefly affected his head." He had severe pain and constant singing in the right ear. He became an out-patient about fourteen days before his admission, having then had for ten days a discharge from the ear. The night before his admission into the Hospital, he found that his mouth was drawn to the left side, On admission it was found that the right portio dura was paralysed, the mouth being drawn to the left and the right eye remaining open. Behind the ear on this side was a hard, red swelling, but no fluctuation could be detected. A linseed poultice was ordered to be applied. About a week after his admission the discharge ceased, but the pain and noise in the ear increased and the swelling remained red and painful. On November 9 fluctuation was detected in the swelling behind the ear. Mr. Stanley made an incision into it and let out some pus. A tent was put in to prevent it healing up. The next day the man was better. The pain and singing in the ear were gone, and the paralysis was much less. On the 10th the improvement was still greater; the discharge had nearly ceased. On the 30th he considered himself well. There was still, however, a very slight paralysis of the face.

A woman of middle age was under Mr. Stanley's care in January last in whom also there was paralysis of the portio dura, consequent on disease of the ear many years before. She was subject to what she called headache, but it was clearly, from her description, neuralgic pain in the affected side of the head and face. This neuralgic affection of the fifth nerve, or part of it, is not uncommon in disease of the ear. Probably the affection of this sensitive nerve is produced in the same way as pain is reflected on several branches of the fifth from disease in a tooth. The paralysis of the portio is, no doubt, due to more direct injury to the trunk of the nerve as it passes through the petrous bone.

In a Report on Syphilitic Affections of the Nervous System, July 27, 1861, Case 2, is a note of a case in which there was spasm of the portio dura on one side. The patient was an infant suffering from congenital syphilis. There was no discharge, but there was evidence of considerable pain in the region of the ear. Very likely there was syphilitic inflammation of the mucous membrane lining the tympanum, the irritation extending to the facial nerve and causing spasm of the muscles supplied by it. In the same report for August 10, 1861, we mentioned two cases, reported by Professor Hassing, in which this form of paralysis occurred in connexion with syphilis. In the same number are details of another case in which both the portio dura and the fifth nerve were paralysed in a case of syphilis, and in which recovery followed on anti-syphilitic treatment. In our reports of "Cases of Deafness Associated with Syphilis" is a case (Case 2) occurring in the practice of Mr. Weeden Cooke in which paralysis of the portio dura followed otorrhœa, and in this case the otorrhœa was probably syphilitic. Now it is just possible that inflammation of the middle ear may be a result of syphilis oftener than is supposed. Of course, in cases of this paralysis in disease of the ear, the aural disease is the starting-point, and the paralysis of the portio dura merely the result of the extension of it to the nerve.

This nerve often becomes paralysed after long standing disease of the ear, and thus gives warning of extending disease of the bone. In a series of cases of abscess of the brain, reported in this Journal for February 23, 1861, is a case in which this was the first symptom of a series of phenomena which shortly ended in the patient's death. He was, when the paralysis of the face came on, in apparent good general health, but he died three weeks later, and an abscess was found in the right cerebral hemisphere.

In another case in the same report, under the care of Mr. Toynbee, facial paralysis took place eleven years after the commencement of disease in the ear. In this case, too, the symptoms proved to be premonitory of extension of the disease to the brain. The patient died seven months afterwards. Abscess was formed in the cerebellum. Of course in many cases in which paralysis of the face occurs from disease in the ear, the progress of the disease may be arrested, and no cerebral symptoms follow; but it should be considered as a serious warning of the possibility of cerebral mischief, even when the cure of the paralysis is hopeless.

Case 4.—Paralysis of the Portio Dura on both Sides.

Catherine O., aged 25, was admitted, at the Islington Dispensary, under the care of Dr. Sutton, on March 14, 1861, for paralysis of the whole of the portio dura on the right side, and a little on the left. She certainly cannot, even on the left, close the eye completely, though much more than the right. The paralysis on the left side came on two years ago "from lying down on a damp sofa." A day or two after, she had violent pains in the left side of the head and face. She could not shut the eye, and used to close it with the hand. The pain in the face did not last long, and then "there was scarcely any feeling in it." It has never quite recovered since, but (as one would expect) it is now able to overcome the totally paralysed right,—but before the right was paralysed the face was *drawn to* the right.

The right side began to be affected two months ago. She went out on a very cold day, and in a few moments found her face was paralysed. Her face was drawn, and she could not shut the eye, though it had never been quite so bad as the other side had been. She has had no pain in that side of the head. She could hear well with both ears. She had, she said, when the left side of the face was bad, a little deafness in that side, but no discharge; but used to have a "sounding or singing in the ear." She was not subject to headaches, and was healthy before the paralysis. She thinks that for the last few days she has had a little coldness in the lower part of the left leg. She is married, and has one child eleven months old; no miscarriages and no deaths. There was no evidence of syphilis, although no direct questions were asked.

A case of this kind, but in which the paralysis was total instead of partial, as in the above case, is reported in our Journal for July 21, 1860. In this case the paralysis was consequent on otorrhœa on both sides, and there was total deafness. Mr. Holthouse has reported a similar case. Dr. Gairdner reports a case in which there was paralysis of the portio dura on both sides in which there was no deafness. Dr. Gull reports a case in "Guy's Hospital Reports" for 1858, p. 186. Cases of this kind give us a good opportunity of analysing various defects in speech. This will be alluded to later.

Several cases of paralysis of the portio dura in connexion with injuries to the head, are reported in this Journal for November 9, 1861.

Mr. Prescott Hewett, in Holmes's "System of Surgery" writes, speaking of the seventh nerve (facial and auditory):—"Paralysis of these nerves is one of the common signs of fracture of the base of the skull. Connected as these branches are with the petrous bone, they may be, and are frequently, torn across in a fracture implicating this region. And although so closely connected—bound up in the same sheath—lodged in the same canal—one of these nerves may be injured and not the other. Facial paralysis not unfrequently exists without deafness; and sometimes there is marked deafness, without any affection of the muscles of the face. The paralysis may be strongly marked, but it may pass off in a few months. In such cases the injury may have consisted in an extravasation of blood within the tubular sheath of the arachnoid belonging to these nerves. I have seen a small clot of extravasated blood lying between the nerves at the bottom of the meatus internus."

Case 5.—Paralysis of the Portio Dura and Fifth Nerve—Symptoms of Tumour of the Brain.

In the following case the paralysis of the portio dura was only part of the mischief, there being also paralysis of the fifth nerve. The association of these two forms of local paralysis is not uncommon, and this case shows one effect of their occurring together, which is not so likely to happen when one nerve only is paralysed.

A man, aged 35, was admitted, under the care of Mr. Poland, November 3, 1860, for ulceration of the cornea of the left eye. The man said that, two years and a-half ago, he fell down suddenly in a fit, in which he bit his tongue through. (He has had no fit since.) It was difficult, of course, to get exact information as to the nature of the fit. All we can do is to put down what he said—viz. that he was

"insensible for two days," and that "it took seven men to hold him." The interpretation of this probably is simply that he had a convulsive attack, and that he did not quite recover from the stupor occasioned by it for several days. He was sure that he had no injury in the fit, but soon afterwards a speck was noticed on the right upper eyelid, which gradually spread, becoming an open ulcer. The Doctor told him it was from the effects of the paralysis. There remained a cicatrix, affecting a great part of the upper lid and a little way on the forehead. After this he continued pretty well until three weeks before admission, when the eye which had never been affected before, began to be inflamed. It was at first bloodshot and weak, so that he could not look at anything. He had had much pain in the course of the infra-orbital and temporal branches of the fifth, and there was a little numbness of the cheek. The conjunctiva was inflamed, the cornea looked hazy, and in the centre was a small depressed ulcer. In the anterior chambers, filling its lower fifth, was a quantity of pus. So far it looked like an affection of the fifth nerve, and very likely the ophthalmia was due to it. There was, however, also paralysis of the portio dura. The mouth was drawn to the left, and he could not close the right eye. It is said by many Physicians that injuries to the fifth nerve do not produce destructive changes, if the eye is protected from cold and dirt. In this case, then, we may suppose that it was the want of power of the orbicularis which left the innervated cornea more liable to destructive inflammation. There was other evidence—as loss of memory, slowness of manner, and great despondency—that there was cerebral affection of some kind, probably tumour. Unfortunately, there is no note as to hearing.

Sir Charles Bell relates a case in which, although there was paralysis of the fifth nerve, no destructive changes occurred in the eye so long as the portio dura remained intact, but when this nerve was paralysed, the innervated cornea being exposed, sloughing rapidly took place.

J. H. J.

LIVERPOOL ROYAL INFIRMARY.

A CASE OF CEREBRAL DISEASE—PECULIAR POSITION OF BODY—CLINICAL REMARKS.

(Under the care of Dr. THOMAS INMAN.)

Martha W., aged 23, a delicate-looking girl, with several cicatrices about the neck, was admitted September 3, 1861, complaining of very severe pain in the legs and thighs, and difficulty in walking. As she was a prostitute, and much given to intemperance, Dr. Inman considered that the pains were myalgic, and the result of too much movement. Her parents were alive, and were healthy people, and a sister who came to see her was equally so. Prior to her application at Liverpool, she had been in the Chester Infirmary for about a month. She had never experienced any injury, had not had any venereal disease, nor any recognisable change in the healthy discharge of every function. Beyond this, no information could be got, fer she was very low-spirited, breaking into tears as soon as spoken to, and being generally taciturn with the nurse. The treatment adopted was, rest in bed, full diet, and tonics. Solution of morphia was injected by Wood's syringe. No improvement being apparent at the end of a fortnight, the case was again specially examined. It was found that there was exquisite soreness over the whole of the lower extremities, that their muscles were soft, small and painful; that the fascia lata was more tender than other parts, and next to this the plantar fascia seemed the most painful. It was clear that there was muscular atrophy, and the spine was consequently examined, but fruitlessly. At this time the patient could readily move the legs and body, but complained of pain in doing so. Blisters along the spinal column were now tried, but without any marked result. In the course of another fortnight there was anæsthesia of both legs and thighs; but the pain continued, and was always aggravated by a touch, even through the bedclothes. The whole body was now becoming atrophied, and the patient assumed the posture which she retained till death, viz.:—The knees were drawn up to the epigastrium, and the heels to the nates. In another week cutaneous sensibility returned, the pain in the thighs decreased, but that in the legs and soles of the feet continued, and was so severe and constant as to interfere with her night's rest. There was no headache nor any convulsive attack. From this time emaciation went on rapidly. The head was brought down from the pillow, and flexed upon the chest, so that the patient seemed like one who was huddling herself together for the sake of heat. The warmth, however, was normal, and the limbs were not rigidly fixed. The bowels were slightly relaxed; the urine was healthy. There was control over the sphincter; the catamenia were regular; but there was no appetite for food. She gradually sank, and died.

November 18.—*Autopsy.*—Head alone permitted to be examined. The brain was somewhat shrunken and anæmic, and there was serous effusion under the arachnoid and in the ventricles. The arachnoid was thickened and opaque, but the most noticeable feature of the case was the presence of unusual consistence and firmness of the white cerebral substance, amounting almost to induration.

Dr. Inman remarks on this case as follows:—In this case, the position assumed by the patient formed a prominent feature, and as I have recently seen such another, I may shortly mention it:—

Margaret H., aged 20, began to complain of pain in the lower extremities and weakness, about two years ago, and this increased to such an extent that, in a few weeks, she was obliged to take to bed. I saw her for the first time fifteen months ago, and was led to the conclusion that there was disease of the spine. Since, however, she has steadily got worse. There has been pain and soreness all over the body daily complained of, and she has gradually assumed the same position as the preceding patient. Like hers the limbs may be straightened, but this is attended with much subsequent pain, and a rapid restoration to the original posture. During the last five weeks the upper extremities have lost all power, and she is now conscious of a steadily-increasing headache. The appetite has quite gone, opiates produce sickness, tonics are not tolerated. The catamenia were regular till very recently, the bowels are relieved by enemata, there is no relaxation of the sphincter, and the urine is natural. Here it is to be feared that some slow cerebral change is taking place, which will eventuate in death. Conversing on this point with my friend Mr. Long, he told me he had noticed that individuals who had suffered from concussion of the brain, with some slight laceration, often assumed a similar posture.

In King's College Museum there will be found the cast of a young girl who died of marasmus, and who assumed a somewhat similar position, though not to the extent noticed above.

THE LONDON HOSPITAL.

SUPPURATED CYST IN THE ABDOMEN—REMOVAL OF A BALL OF HAIR—RECOVERY.

The following is a case of very unusual interest. As will be seen by the history, there was some reason to believe that the tumour, which the woman complained of, might be dependent upon an extra-uterine fœtation. Such was, indeed, the opinion of several of those who took part in the consultation prior to the operation. The expected result of the latter was that some bones and other remains of fœtal structures would be extracted. We give the notes, as supplied by Mr. Woodman, the House-Surgeon in charge of the case:—

Large Tumour in the Abdomen with Two Fistulæ near the Navel—Fetid Discharge with Escape of Hairs—History of many Pregnancies and of the Last Confinement a Year ago—Diagnosis of Extra-Uterine Fœtation—Operation by Enlargement of the Fistulæ—Removal of a Matted Ball of Hair—No other Fœtal Remains found—Recovery of the Patient and Closure of the Wound.

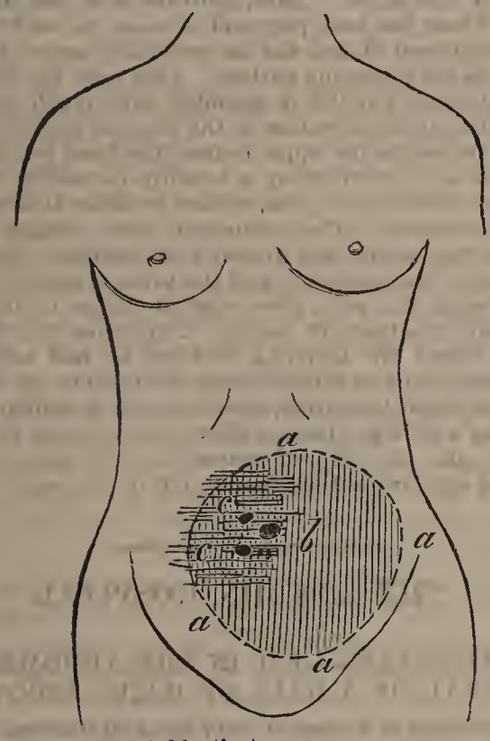
(Case under the care of Dr. BARNES and Mr. CRITCHETT.)

[Reported by Mr. B. WOODMAN.]

Eliza L., aged 38, a toymaker's wife, from Bethnal Green, was admitted on July 22, 1861. She was found to have a tumour, about the size of an adult head, nearly globular, in the situation shown in the sketch, with two fistulous openings to the right of the navel, surrounded by an inflammatory blush. The tumour was somewhat moveable, and uniformly dull on percussion. There was also, it would seem, some fluid in the abdominal cavity. She brought with her some

hairs, which she said had been discharged with the pus, which still oozed on pressure from the open sinuses. The uterus appeared nearly normal in size (unimpregnated). She stated that she had always enjoyed good health, with the exception of two or three attacks of rheumatic fever. The catamenia appeared first when she was 13. She was married at 18 to her first husband, by whom she had two children, and miscarried once at four months. She had three children by her second husband, to whom she had been married five years. Two years ago she had a "fright," and when six weeks gone with her last child (now 11 months old) she had a severe fall. Before her confinement she had severe pain in the left groin and left side. The child seemed, she said, to lie lower down than usual during gestation, "right down on her thighs." It was born at full time, but was an extremely small girl, "like a twin." She suckled it five months only. Directly after its birth, she noticed that she was larger than usual, and she continued so to increase in size till weaning the child. The tumour, first discovered after her confinement, "lay all to the left."

Five weeks after Christmas "it burst near the navel," and "quarts of clear, yellow stuff," like water, escaped, and some "jelly-like stuff," afterwards a bunch of hairs, then a piece of something hard as big as a finger. She thought it was flesh—it was very hard. Then "corruption" began to come, and with this little bunches of hairs.



a, a, a, a.—Space occupied by the tumour.
b.—Umbilicus.
c, c.—Two sinuses near the navel.
The doubly shaded portion shows an erysipelatous blush from irritation and discharge.

She had never menstruated since her confinement.

July 31.—The principal discharge now seems to be through the umbilical cicatrix, which has given way—there is some air in the cyst—the pus is very offensive, and hairs are still discharged, new ones peeping through the opening when the cyst is pressed. The tumour is less tense, and the probe when introduced strikes something firm. A consultation was now held, and the difficulties in diagnosis fully discussed. The account given that the tumour had been first found after a confinement of a very small child and that it had a few months later become the seat of inflammation very much tallied with what is not unusual in the history of some cases of extra-uterine fœtation. From the fœtid character of the discharge and the escape of fœtal hairs by the fistula, still stronger arguments were afforded in support of such an hypothesis. Nothing could, however, be felt which resembled fœtal limbs or bones. It was decided that that the fistulæ should be freely enlarged and the contents of the cyst cavity explored, and if practicable, removed. As there had been much inflammation about the cyst and as it was firmly fixed to anterior parietes, Mr. Critchett felt confident that the contemplated enlargement of the fistulæ might be done without risk of opening the peritoneum.

The operation was performed on August 15. Chloroform having been administered, a small incision was made on a director introduced at the umbilicus, cutting downwards, a large quantity of horribly fetid pus escaped, and, after some manipulation, a flattened bundle of matted hairs was extracted, the mass much resembling the hairs found in a calf's stomach. The finger being introduced, met the walls of the cyst in every direction, which were thick and adherent to the abdominal parietes. The opening was further enlarged inferiorly and lint introduced. The hairs, examined by the microscope, were found to be perfect with exception of wanting bulbs, and were coarse, like those found in ovarian cysts.

August 20.—There has been a good deal of discharge, but the pus is very healthy and the wound looks well; very little constitutional disturbance, appetite good.

September 3.—Cyst much diminished, still some discharge, but wound almost closed; health good; gets up daily.

15th.—Cyst now the size of an orange; still discharges.

20th.—Cyst very much smaller; less discharge; general health excellent; made an out-patient.

Mr. Woodman heard of her in October, when she was quite well, the wound being almost closed up.

In reviewing this case by aid of the light thrown upon its nature by the operation, there seems every reason for regarding it as an example of suppuration of an ovarian hair-growing cyst. That occasionally such cysts do produce hair and all the other appendages of the dermal layer (teeth, etc.,) is a fact well known to pathologists, and respecting which much has been written. Had the tumour been the result of extra-uterine fœtation, it must have contained bones as well as hair. It is an interesting fact that the tumour had remained free from inflammation during so many pregnancies. As regards the operation the result shows the wisdom of its performance, as it rid the patient of a constant source of annoyance which she could in no other way have been freed from.

GUY'S HOSPITAL.

CASES OF INDUCTION OF PREMATURE LABOUR.

(Under the care of Dr. J. BRAXTON HICKS.)

Case 1.—*Contraction of the Brim of the Pelvis—Labour Induced at Seven and a-half Months—Child born alive—Recovery.*

Mrs. M., aged 38, was admitted into Mary Ward on July 21, 1861. She had had three full term labours, each of which had been accomplished with great difficulty, involving the death of the children. She also had had six labours induced at the seventh month by the uterine douche. Of these two of the children died in the birth, and most of them presented transversely. On her admission, Dr. Hicks found the os and cervix uteri somewhat open and dilatable. Four or five ounces of tepid water were injected between the membranes and the uterus; but no action arose from this treatment. The os was then dilated by Dr. Barnes' India-rubber dilators, which effected that object with much readiness. However, no pains appearing for a day and a-half, secale cornutum was given. After the third dose the pains arose, and a living child was born with the greatest ease. The placenta followed immediately without hæmorrhage. The mother recovered very rapidly, and at the time of her leaving the Hospital, the child was doing well.

Case 2.—*Contraction of the Brim of the Pelvis—Induction of Premature Labour at Seven and a-half Months—Child born alive—(Death next day)—Recovery of the Mother.*

Mrs. C. was admitted into Mary Ward on November 8, 1861. Had had six children, but only one was born alive, the remainder having died in the birth, in consequence of the very severe and protracted labours. She was at the seventh and a-half month of pregnancy when admitted. The os uteri was in this case at once dilated with the India-rubber bags, as in the other case. The object was effected in a few hours. Pains did not come on for twelve hours. Two doses of secale cornutum were given. These, however, proving ineffectual, the membranes were punctured. In about six hours the child was born alive, its passage being very easy. The placenta followed immediately. The mother recovered very quickly, but the child died the next day.

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Medical Times and Gazette.

SATURDAY, DECEMBER 14.

ASSURING DISEASED LIVES.

THE possibility of assuring diseased and doubtful lives, with a due regard to the interests of assurers and assured, has for some time occupied the attention of both Actuaries and Physicians, and has lately been brought prominently before the notice of the Profession by Dr. Stewart. Numerous difficulties are involved in the proposition, but that they are not insuperable we believe to be proved by an examination of the basis on which the science and practice of Life Assurance rest. Whilst, on the one hand, every-day experience demonstrates that, although all men are mortal, all men are not equally so; on the other, a wider and more exact observation proves that a high degree of uniformity prevails in the rate of mortality at different ages amongst large masses of the population. By the combination of individuals in sufficient numbers, therefore, it is found that the risks of life may be equalised, and can with certainty be predicted. All the calculations of Assurance Companies are founded on the death-rates of entire communities, including the diseased as well as the healthy; and there is no doubt, supposing the case of Government becoming the assurers, and enforcing the assurance of life at an undeviating rate on every person arriving at a certain age, without reference to condition of health, occupation, or position,—however unjust to individuals such an impost might be,—that ultimately it would be found to have been a perfectly safe undertaking on the part of the assurers, every claim on them by the representatives of the assured having been amply provided for.

On a smaller scale of operations, however, where the numbers combined are fewer, and where, consequently, each minor influence produces an appreciable effect, experience has shown it to be only by the careful selection of lives that a mortality not exceeding the general death-rate can be secured. Amongst the influences which raise the liabilities of a Company thus selecting its members to a standard equalling that deducible from the average mortality of the population, is the deterioration which inevitably, in the course of a few years, takes place in assured lives; a deterioration especially resulting from the wear and tear of body and mind incurred by those commercial and professional classes from which the great body of the assured is derived. Other causes are to be found in the errors and oversights which the greatest care in selection will not always avoid, and in the circumstance that those who continue in good health are much more likely to cancel the engagement by the non-payment of premiums, than those who, since their assurance, have become the subjects of disease. Hence it is that many Offices accept only what are termed first-class lives, and reject every proposal which may be referred to a doubtful category.

By such a course, however, the benefit of life assurance is denied to numbers of individuals, to whom, as their longevity proves, it might have been safely extended. Medical Practitioners do not require to be told that many lives which are undoubtedly to be classed as diseased or doubtful, nevertheless arrive at the utmost limits of human existence. Cases present themselves on all sides in which disease of important organs has been no bar to the performance of the duties of life, nor has prevented an attainment of what may be rightly considered a green old age. And again; how frequently does it happen that persons whose tenure of existence, whether on account of family history, habits, or occupation, is certainly doubtful, yet escape all the rocks and quicksands which appear to imperil their track, and in due time arrive at the last haven after a long and prosperous voyage. Taking these facts into consideration, it has become the practice with many, especially of the more modern Companies, to accept such lives on the recommendation of their Medical advisers, adding at the same time a certain number of years to the age, in order to cover the increased risk incurred. As regards the Companies, it must be admitted that in most instances this practice has answered well; but, as regards the persons so assured, there can be no doubt it has been attended with considerable injustice. Those who have avoided the dangers by which they have appeared surrounded have paid far too much, whilst others who have fallen early victims to their threatened fate have paid far too little. This must be so whilst all accurate data are wanting by which the chances of life in diseased and doubtful cases may be calculated. A slight consideration will at once show the value of such data, and that, however great the obstacles to be encountered in obtaining them, until they are possessed, the assurances in question can never be effected on an equitable basis. Their extra liabilities must be assessed by individual opinion—a mode of proceeding dangerous to the assurers, and in most cases highly injurious to the interests of the assured. But the difficulty of obtaining the required information, although great, is not insurmountable. The united efforts of the Medical Profession might in the space of a few years arrive at the average length of life after a first attack of pneumonia or of rheumatic fever with heart complication, or after the first fit of gout or renal calculus. It would be still easier to obtain the average age at death in families where the presence of hereditary disease has been manifested. We are inclined to believe that the influence of many chronic maladies on the average duration of existence would be found to be smaller than has been heretofore supposed. In what proportion, for instance, of those who are the subjects of hernia, varicose veins, hæmorrhoids, or fistula in ano does a curtailment of life really result? How far is its tenure in the female shortened by ovarian disease or by fibrous tumour of the uterus? Or again, to what extent is the value of a life deteriorated by the occurrence of epilepsy at some period of its history, or by the existence of cicatrices from early scrofulous disease in the external lymphatic glands? For the solution of these and similar questions the Assurance Offices themselves are yearly accumulating information. But, in addition, the individual experience of Practitioners in private and Hospital practice might be collected and tabulated, and a large body of facts might be obtained from the various departments

of our public services. A great accession to our knowledge would result from a registration of the age at death of every person invalided and pensioned from the Army and Navy on account of disease of particular organs. Due allowance must, of course, be made for peculiarities in the habits and modes of life of the classes observed, also for errors in diagnosis; but these and similar accidents would produce but slight effect on calculations based on the experience of a large section of the Profession.

In the meantime, while the amount of extra premium to be paid by persons whose state of health is below the average must be fixed on the individual judgment of the Medical adviser of the Company, any plan by which the weight of extra payment may be more fairly apportioned demands consideration. It has been proposed that doubtful and diseased lives should be assessed at the ordinary rate of annual payment, but that a sum endorsed on the policy at the time of its being granted, and representing the extra yearly premium recommended by the Medical adviser, should be deducted from the sum for which the life was assured in case of death taking place before the annual payments had covered the liability of the Company. In case of the life being prolonged beyond that time, the whole sum for which the deceased insured would be paid to his representatives at death. Such a plan would in part meet the requirements of the case, but would still be open to the objection that the amount to be deducted, in the case of early death, not having been fixed on any acknowledged basis of calculation, would in the majority of instances fail to represent the real amount of extra risk incurred by the assurers.

THE WEEK.

A BULLETIN of the health of the Prince Consort was issued from Windsor Castle on Wednesday:—

"His Royal Highness the Prince Consort is suffering from fever, unattended by unfavourable symptoms, but likely, from its nature, to continue for some time.

"JAMES CLARK, M.D.
"HENRY HOLLAND, M.D.
"THOMAS WATSON, M.D.
"WILLIAM JENNER, M.D."

From the above bulletin our readers will learn that H. R. H. the Prince Consort is suffering from a disease popularly known by as many names as it has forms. For nervous fever, gastric fever, intestinal fever, low fever, continued fever, are all essentially the same disease. An epidemic of this disease, it may be remembered, affected Windsor some two or three years ago. The earlier symptoms of the disease are, in very many cases, those of a feverish cold, and the first information of the Prince's illness the public had was from a notice in the *Court Circular* to the effect that he was suffering from such an attack; then we were informed that the feverish attack continued, and was considered to be likely to last some time longer. From these two notices the nature of the illness was pretty clear to the Medical Profession. Sir James Clark, Dr. Jenner, and Mr. Brown of Windsor have been in constant attendance on the Prince for some time, and either Sir James or Dr. Jenner have always been in the Castle. On Monday last Sir Henry Holland and Dr. Watson were joined in consultation with Sir James Clark and Dr. Jenner. As the life of the Prince is of the highest importance to the country, it will afford the greatest satisfaction to the Profession and to the Public to know that a Physician who has so long and so justly possessed their confidence, and who has attended the Prince for every ailment from his early manhood, is not only in the enjoyment of all his mental vigour, but has sufficient physical strength to enable him to be unremitting in his attentions to his illustrious patient; and it is equally satisfactory to know that the Prince has the advantage of Dr. Jenner's care—for there is no living Physician who has enjoyed a larger experience of Fever in general, or to whom the Profession are so much indebted for their present knowledge of its various forms, and especially of the characters which distinguish the precise form of fever under which the Prince is now suffering from the dreaded Typhus.

Dr. Edwin Hearne is indefatigably stirring up the "dirty party," who have so long held undisturbed reign at Winchester. The lower part of the town is said to be very unhealthy. Some of the ratepayers deny that this is due to want of drainage. "The truth is, the *higher mortality* of St. Maurice, and the lower portions of the town, *does not arise from a want of drainage*, but from causes which drainage cannot remedy or remove—overcrowded dwellings, filthy habits, poverty, intemperance, and, above all, a want of wholesome water." To which Dr. Hearne justly replies: "As if anything but unwholesome water can be obtained from the immediate locality of an undrained populous district! And what can more aid the development of filthy habits, poverty, and intemperance, than the unwholesome emanations and consequent diseases certain to result from an accumulation of cesspools?" We learn that one death from *typhoid fever* has again occurred at Winchester College. It is gratifying to find members of our Profession in all parts of the kingdom not quietly sitting down to treat the sick, but actively bestirring themselves to effect the removal of the causes of sickness. Dr. Balman, of Exeter, is advocating the reconstruction of the dwellings of the poor. In a letter to a local paper, he describes a state of things in Exeter which we are accustomed to associate with larger cities only; whole families stowed away in single rooms, large infant and general mortality, the death-rate being twenty-five in the thousand, and wholesale destruction of poor dwellings with inadequate efforts to build new ones. He advocates the formation of Societies which shall buy and improve dwellings, and let them at remunerative rates, keeping, of course, a control over the number of inmates, and having strict regard to their character and habits. He gives just praise to the Rev. Mr. Turner, of St. Mary Major, who has carried out such a scheme in his own parish, and provided fourteen wholesome tenements, and suggests that the best monument to the late Lord Fortescue would be the foundation of some Society for improving the poor man's dwelling. Members of our Profession are sure to win the solid respect of their fellow-citizens, when they furnish them with such temperate, well-considered statements on the prevention of immorality and disease.

Murder and suicide continue to give alarming evidences of the UNCONTROLLED passions which rage in the bosoms of persons, whose education and religious training have been imperfect. At Sheffield, a man first of all attempted to murder his step-daughter, whom he had vainly endeavoured to persuade to live with him in an incestuous manner, and afterwards murdered himself. His purpose had been so clearly expressed, and his arrangements so deliberately made, and there was such absence of any previous symptoms of insanity, that the jury returned a verdict of *felo de se*. One witness deposed that "On one occasion, about a month ago, after speaking to the injured girl, he remained and had tea with witness, and subsequently remarked that it was the last tea he should have, saying that he would destroy himself either on the following morning or on the succeeding Saturday. Witness remonstrated with him, and he then said that 'She (Eliza Fisher) had said the word' (meaning that she would not go back with him), and added that 'he had made it all

right with his Club, and arranged that the surplus money, after paying his funeral expenses, was to be divided between his two young sons."

The wife of a farmer at Slaugham, last week, cut the throats of two children, and then her own. One child was killed, the other, with the mother, survives yet. The poor woman had long been of unsound mind.

A young Welsh chemist had been living with a girl of the town at Chester, aged nineteen. His money failed, and having first expressed his intention of poisoning himself, persuaded his companion to do the same. He accordingly procured laudanum by writing a Latin prescription, and poured out a glassful for the girl and another for himself. He gave it to her, and she to him; but in this case the usual conditions were reversed, he was poisoned effectually, she soon became alarmed and screamed out, so that Medical assistance was procured, which saved her. She was tried for wilful murder, and acquitted, the verdict being received with "enthusiastic cheering," in the Assize Court at Chester.

Ovariotomy has entered on a new epoch in France. M. Nélaton has devoted a lecture to it at the Hôpital des Cliniques, and has called upon "those Surgeons who occupy high positions to cordially give the assistance of their moral support *(pretent loyalement le concours de leur appui moral)*,—to those of our brethren who dare to take upon themselves the responsibility of these operations." M. Nélaton describes a very remarkable operation which he saw performed on November 21 by Mr. Brown. An adherent coil of intestine had to be separated by dissection; the bladder, distended, next presented itself, and had to be replaced and separated from the cyst; parietal adhesions had to be divided by scissors and scalpel; the uterus having been accidentally wounded, and an artery on its suaface bleeding freely, five silver sutures were applied to this uterine wound, we cut off short, and left. To the great astonishment of M. Nélaton, the patient was doing well on the day after the operation; and, although very ill five days after it, seemed remarkably well on the eighth day. After a very graphic description of this case, M. Nélaton goes on to say that "ovariotomy is in England a usual, established operation. Messrs. Spencer Wells, Simpson, Clay, Tyler Smith, etc., daily have recourse to it, and Dr. Jules Worms has collected more than 500 cases, the results of which he has extracted with the greatest care, ... and it appears from his statistics that the proportion of cures is rather more than one-half." After showing that this proportion of recoverics is at least equal to that obtained in France after amputation of the thigh, removal of large urinary calculi, or the ligature of large arteries, M. Nélaton attributes the reprobation of the operation by French Surgeons to doubts as to the authenticity of recorded successful cases; to the belief that many unsuccessful cases have not been reported; to the knowledge that death has often followed so closely upon the operation that it was evident to all that the operation alone was the cause of death; that in some cases it has been found impossible to complete an operation which had been commenced; and that of the five or six times in which the operation has been practised in France, *all* have proved unsuccessful. The reasons he gives for the greater success obtained in England are curious; and, while partly true, show just that amount of knowledge of English habits which might be expected from a Frenchman who had passed twenty-four hours in London. He says that we English "succeed because patients are placed under favourable conditions,—the secret of all cures. In a word, according to information which I was able to obtain, ovariotomy, in common with other capital operations, does not succeed better in London than in Paris when it is practised in large crowded Hospitals. It is in the *maisons de santé*, in small private Hospitals, that these operations are performed, and, it must be said, with success. . . . . These private Hospitals *are numerous in London and throughout England* (!), the patients are perfectly quiet in them, never suffer from overcrowding, and are under the best possible conditions for recovering from the most severe operations. It is by imitating our English colleagues, by distributing in houses situated in the environs of Paris, and freely ventilated, the patients upon whom we perform such severe operations as ovariotomy, the Cæsarean section, lithotomy, amputation of the thigh or at the hip-joint, etc., that we shall arrive, as they do, at brilliant success in the treatment of affections which hitherto have, for the most part, only ended in a more or less speedy death."

Mr. Ryde, Surveyor to the Charing-cross Railway Company, informs the public that Mr. John Stewart, of Liverpool, the umpire duly nominated and appointed by the Board of Trade, has by his award, dated the 7th of December instant, settled and determined that the compensation to be paid by the Charing-cross Railway Company, as well for the purchase in fee simple of the whole of St. Thomas's Hospital and premises with the appurtenances, as for the damage sustained or to be sustained by the Governors by reason of the execution by the said Company of the works authorised by the Charing-cross Railway Act, 1859, and the exercise by the said Company of the powers of the said Act and the Acts incorporated therewith, shall be the sum of £296,000. The claim, it may be remembered, was £750,000. The sum awarded is less by £24,000 than was calculated on good grounds; but it is still amply sufficient to build such an Hospital as we may have dreamt of, and we may some day hope to see.

REVIEWS.

A System of Surgery, Theoretical and Practical, in Treatises by various Authors. Edited by T. Holmes, M.A. Cantab., Assistant-Surgeon to St. George's Hospital, etc. etc., in Four Volumes. Volume II. Local Injuries: Diseases of the Eye. Pp. 895. London: Parker, Son, and Bourn. 1861.

Cooper's Dictionary of Practical Surgery and Encyclopædia of Surgical Science. New Edition, brought down to the present time by Samuel A. Lane, Surgeon to St. Mary's Hospital, etc., assisted by various eminent Surgeons. In Two Volumes. Vol. I. Pp. 1085. London: Longmans. 1861.

We will endeavour to combine in one notice an account of the two important works whose titles we have just transcribed. Whoever amongst our Surgical readers can find money for the purchase, and room on his shelves, should have them both. But as every one may not be so fortunate, we will try and point out the respective peculiarities of each, so that anyone able to indulge himself with one only, may select that which best suits his pocket and his requirements.

As to price, the four volumes of Holmes's System will cost four guineas, the two volumes of Cooper, two guineas. We calculate that the former work in the four volumes gives about 1,500,000 words in 3600 pages of luxuriously large, clear type; whilst Cooper's two volumes will give 2,272,000 words in about 2000 pages of clear but yet smaller type, in double columns. Each is destitute of illustrations. Holmes's System gives the whole field of Surgical theory and practice, mapped out into separate compartments, each described by a Surgeon specially qualified for the particular subject confided to him. Cooper's Dictionary gives what was originally an account of the operations of all the labourers in the Surgical

field, systematized by one mind. Yet, in the new edition by Mr. Lane, the several subjects have been entrusted to various authors for revision, so that the homogeneous nature of the original must be modified by the special character of the several revisers. Holmes's may be expected to give the judgment of one competent man on each subject: Cooper's to give the judgment of one man on the whole. Holmes's should tell us all that a man need know: Cooper's all that he can know. The one may exclude many things that are curious or even useful; the other is likely to include some things that are useless. The former seems the better calculated for the man who aims at being a good Practitioner merely; the latter for him who is also of a philosophic turn, and desires to know not only what is believed, but what has been. In Holmes each writer speaks individually: in Cooper most subjects are detailed in a sort of bibliographical mosaic, in which all the leading authorities are laid under contribution, and quoted in their own words. Cooper's may be compared to a constitutional monarchy, Holmes's to a Federate Republic; but, "to let similes drop," let us open the volumes and see what may be in them.

The second volume of Holmes contains an account of Gun-shot Injuries, by Mr. Longmore, which concludes the General Pathology part of the work; the Injuries of the Head, by Prescott Hewett; of the Back, by Mr. Shaw; of the Face, by Mr. Holmes Coote; of the Neck, by the late Mr. Gray; of the Chest, by Mr. Poland; the Abdomen, by Mr. Pollock; the Pelvis, by Mr. Birkett; the Upper Extremity, by Mr. Flower; the Lower Extremity, by Mr. Carsten Holthouse; and the Injuries and Diseases of the Eye, by Mr. Dixon.

Cooper's First Volume contains the various subjects up to and including letter H. The Injuries of the Head are revised by Mr. John Adams; the Blood and its Changes, by Mr. Ansell; the Surgery of the Eye is revised by Dr. Bader; Cataract, by Mr. White Cooper; Aneurism, by Mr. Erichsen; Cancer, by Dr. Handfield Jones; Absorption, Erysipelas, and Hospital Gangrene, by Dr. Druitt; Burns and Cicatrices, Harelip, etc., by Mr. Spencer Wells; Gun-shot Wounds, by Mr. Blenkins; Hernia, by the Editor; Amputation, Fractures, and Dislocation, by Mr. J. R. Lane; Diseases of Bone, by Mr. Spencer Smith; Anæsthesia, by the late Dr. Snow. Mr. Coulson, Dr. Tyler Smith, and Mr. Thomas Wakley, are amongst the promised contributors to the ensuing part of the work.

Such, then, in Homeric phrase, being the competitors, and such their origin, let us compare them; and as fair a way as any will be to collate the first article in Holmes' Second Volume—Gun-shot Wounds, by Mr. Longmore—with the corresponding article in Cooper, revised by Mr. Blenkins.

Every change in any one practical art, disturbs all the others. So it is that the modern improvements in fire-arms have revolutionized Military Surgery, and rendered even the works of Guthrie antiquated. This appears from Mr. Longmore's introductory remarks, and from the description of the varieties of gun-shot wounds with which he begins his article. He writes fully, concisely, and systematically. The wounds are described as they are influenced—firstly, by the form and nature of the missile. The various kinds of ball, shell, and splinter are described, with the observation that, although we do not know what a round musket ball would do, if propelled with a velocity equal to that of the conical rifle bullet, yet that the shape of the latter is of material influence in increasing its penetrating power. Thus, supposing one of the old musket bullets to strike a limb at 80 yards, and an Enfield rifle conical bullet of the same weight at 800 yards, the rate of velocity being similar in each case, the injury from the latter may be expected to be considerably greater than that from the former on account of its shape. The wedge-like quality of the conical bullet is well shown in the shafts of the long bones. Their solid osseous texture is split up longitudinally, and the fissures often extend up to the nearest joint. Round balls might comminute the long bones into cubical fragments, but scarcely fissure them. Conical balls are not stayed nor diverted by tendons, but pass through, or turn them aside. Hence, balls are rarely found *lodging* in the wounds of modern warfare. Double bullets, linked with wire, were employed by the Russians, but the wire was probably soon broken after leaving the muzzle of the piece, and no special effects are recorded from these missiles. Incendiary balls are believed to have been employed towards the close of the campaign, and to have caused some frightful injuries. The peculiarities of *indirect* missiles, *i. e.*, of fragments, splinters, etc., set in motion by a shot, are next discussed, and the author goes on to the *second* point, *i. e.*, to varieties of gun-shot wounds as affected by the degree of velocity of the missile. And here is the great improvement of modern missiles. In 1851 the common musket-ball was estimated to move at the rate of 850 miles per hour, the rifle-ball at 1000, the 24-lb. cannon-ball at 1600; but then the musket-ball could not be depended on beyond 80 yards, nor the rifle beyond 200 to 250, whereas now the common Enfield rifle is sighted to 900 yards, and the short Enfield to 1100. The greater velocity of modern balls makes them more destructive locally, and greater causes of shock to the system. The *number of wounds in battle* is much greater than of yore; multiple wounds in the same person more common. Hence the quantity of surgical attendance and appliances must be greater now than it was in the old Peninsular and Waterloo campaigns. Spent balls and lodgment of balls then come under notice, with abundance of anecdotes of the latter from old and new sources. The varieties depending on seat of injury, and the curious cases of tortuous course of balls, are next mentioned, but the latter belong to the history of the past. The old round bullet might be diverted; not so the modern conical rifle ball. The author goes on to trace the symptoms of gunshot wounds;—the shock which, when separated from "alarm," is evidently essentially related with disturbance of the vital force; the hæmorrhage, of which Mr. Longmore says that probably more persons would be found to have died of wounded arteries, if it were possible to examine the wounds of those who die on the field. Then we have the prognosis and treatment of gun-shot wounds in general, which are conducted on principles analogous to those of general Surgery, though we may notice, in passing, the just stress which Mr. Longmore lays on the value of cleanliness and fresh air; of cloths dipped in creosote to keep off vermin; and on the use by the French of the perchloride of iron as a medicine, and as a local application to flabby wounds and those showing tendency to pyæmia,—a remedy to which we humbly desire to add our heartiest commendation.

The general history of gun-shot wounds is followed by the special history of their effects on every region of the body—the head first. Wounds of the scalp, seemingly simple, are stated to be often attended with deeper mischief to membrane and bone, and the consciousness of this should lead to extreme caution during the recovery. Drunkenness may convert an ecchymosis slowly undergoing absorption into a fatal apoplexy. The history of wounds of the bone, with or without injury of the brain, derived from modern military experience, is little favourable to the use of the trephine; and Military Surgeons now believe that patients on whom the older Surgeons operated so frequently and successfully, had little to recover from besides "the effects of the operation itself." Wounds of the back and face next follow, and amongst the latter are noticed the case of the French officer recorded by Guthrie, whose entire face was destroyed, except that one eye was left hanging from the orbit; and of a Zouave officer whose entire face, jaws, tongue, and eyes were carried away, and yet each lived about a day after this frightful injury. Gun-shot wounds of the chest are treated of with the caution, that although in a few cases extensive bleedings have been of service, yet in general a soothing, tonic, nutrient regime is necessary. Gun-shot wounds of the abdominal and pelvic viscera are next described, and a series given of hair-breadth escapes from these usually fatal injuries. Gun-shot injuries of the limbs follow, about which we learn of six English recoveries after gun-shot fracture of the femur, and the fact that wounds heal more readily in southern latitudes because the patient can have more fresh air by day and night. Secondary hæmorrhage, tetanus, and the use of chloroform in Military Surgery are then treated of, and we need scarcely say that on the last point our author marches with the times, and will not deny wounded soldiers that soothing influence so useful to their civil brethren. A few remarks on the after usefulness of wounded soldiers, and on the importance of the *special* study of Military Surgery by the aid of the Army Medical School and Museum, conclude this very excellent essay. It measures 95 pages, or about 3990 words, and is illustrated by reference to or quotations from Hunter, Blane, Guthrie, Scrive, Appia, Daniell, Armand, M'Leod,

Hennen, Habershon, Dupuytren, the authors of the "Blue Book" Surgical History of the Crimean War, Baudens, Percy, Velpeau, Stromeyer, Ballingall, Williamson, Fraser, Fuge, "Dict. des Sciences Méd.," "Indian Annals," Taylor, Copland Hutchinson, Larrey, Esmarch, Tuffnell, Jules Roux, and Hayward, of Boston. Throughout the essay the subject is presented in an orderly, logical, authoritative style, and every question and statement given according to the judgment of the author.

Now let us look at the article Gun-shot Wounds in Cooper, revised by Mr. Blenkins. It is contained in about 39 pages of 52,304 words. We mention the quantity of matter because we wish to guide our readers as to the nature of their proposed investment. It is exactly half as long again as the article in the preceding edition of Cooper, dated 1838. It consists of the original material (which again was composed of extracts from the principal writers on the subject, interspersed with remarks and additions by Mr. Cooper), with additions in the same style by Mr. Blenkins. We have a definition and symptoms after Hennen; a few remarks on modern conical balls by the Editor, extracts from Hennen and Guthrie, on the pain, bleeding, and shock; a notice of Pelikan's experiments on the wind of balls, and an account of the effects of guns loaded with powder only, or with small shot—which do not appear in Holmes—an account of the injuries from various kinds of balls, splinters, etc.; bits from Dupuytren, H. Larrey, and John Hunter on the progress and results of gun-shot wounds; an account of the course and lodgment of projectiles, then of secondary hæmorrhage, and then the general treatment, to which the Reviser adds, in a pithy sentence, a summary of his own practice in the Crimea. Next an elaborate account of amputation, immediate and secondary, and the cases which demand it, illustrated with copious statistical tables from the official History of the Crimean War. After this, a description of gun-shot injuries of the various regions of the body in order, all illustrated with the official statistical tables, and with copious remarks by the Reviser, and a short vindication of the use of chloroform in Military Surgery.

The difference between the two articles is intense. The one is new and homogeneous,—tells us what the writer has to say, with quotations sufficient to illustrate and support him. The other is heterogeneous, and tells us what all authors say—that is, most systematic authors since the time of Hunter—it consists for the most part of a basis of Peninsular Surgery, with the addition of the Reviser's personal experience, and the results of modern warfare. If we compare them, we may say that the former is scarcely so copious as we should have desired, admirable though it be, and that it is better adapted for a man who has his Profession to learn; while the latter is the book for one who, having learned his Profession, desires to enrich his knowledge with the statistics and general literature of the subject.

Two such books deserve a second notice, in which we will continue our comparison.

Letts's Diary and Medical Diary for 1862.

The Editions of these useful Diaries which we have seen for 1862, are, No. 11, published in cloth boards at four shillings, and the Medical Diary in a cloth clasped case, for the pocket, at two shillings. The latter forms a very convenient pocket-book, or daily visiting list, and the former is admirably adapted for the library.

Paris Faculty of Medicine.—M. Tardieu has been appointed to the chair of Legal Medicine, in the Paris Faculty of Medicine, in place of M. Adélon retired, and named Commander of the Legion of Honour.

At the seventeenth Annual Meeting of the Glasgow Southern Medical Society, held on Thursday, the 5th inst., the following gentlemen were elected Office-Bearers for the ensuing Session: —*President*—Dr. Henry Dunbar; *Vice-President*—Dr. James Stewart; *Treasurer*—Dr. H. R. Howatt; *Secretary*—Mr. Edward McMillan; *Seal-Keeper*—Dr. James Morton; *Court Medical*—Dr. James Morton, *Convener*; Dr. James E. Newman, Dr. H. R. Howatt, Dr. Henry Dunbar; *Officer*—Thomas Robertson.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON CHLORATE OF POTASSA IN PHTHISIS.

By Professor AUSTIN FLINT.

The late Dr. Fountain having successfully employed this remedy in three or four cases, Dr. Flint resolved to give it a careful trial at the New Orleans Charity Hospital in November, 1860. It was administered to all cases so long as these did not seem to be losing ground under its use, no other remedy being employed except syrup of sulphate of morphia (one grain of morphia to one ounce of syrup) as a palliative of cough. Alcoholic stimuli were excluded, except in some cases in which their withholding seemed improper. The full Hospital diet was allowed to all, and whenever the weather and the strength of the patients permitted, they were encouraged to go out of doors.

While observing the effects of remedies for phthisis in Hospital patients, certain precautions have to be regarded. The change alone will sometimes produce a marked improvement, as when the comforts of an Hospital are exchanged for insufficient food, miserable lodgings, and the hardships incident to drunkenness. The expectation of benefit is sometimes not without influence. On the other hand, sometimes the change is for the worse as regards diet and accommodation, while the hygienic circumstances of, and moral impressions from, an Hospital may be pernicious. The sanguine statements of the patient must not mislead the Practitioner, who must rely on his own observation of the progress of the case. Some patients in this, as in other chronic diseases, may, however, become tired of the remedy when long continued, and may be led to believe that they are not improving from mere desire of change in treatment.

Dr. Flint furnishes in this paper notes of fourteen well-observed cases, and comes to these conclusions respecting them:—1. Of the fourteen cases in which the chlorate was given in sufficient doses, and for a sufficient period to test its powers, in nine the histories afford no evidence of any salutary influence. In four cases circumstances render it doubtful whether much or any influence can be attributed to the remedy; and in one case only is there reason to believe that the chlorate exerted any special efficacy. 2. As in all these cases but one the amount of tuberculous deposit was abundant, and in nearly all the disease had existed for a considerable period, it is possible that different results might be obtained in more favourable cases. In concluding that the remedy possesses no special influence in phthisis, it does not follow that in a certain number of cases it may not be useful. By a special influence is meant a power to control to a greater or lesser extent the pathological processes belonging to the disease. A remedy may fail to do this, and yet be beneficial, as are many tonic remedies in phthisis. 3. The chlorate may be given in phthisis to the extent of half an ounce per diem with entire impunity and without occasioning any unpleasant symptoms. It does not produce diarrhœa, and may be well borne even when this is present.

The subject calls for further investigation, and we are glad to subjoin the opinion of so eminent a clinical observer as Dr. Flint upon the importance of records of the cases being kept. "The cases should be recorded. To carry in the mind all the important facts in a series of cases having reference to the value of a remedial agent is simply an impossibility. I do not mean to be understood as saying that the conclusions drawn from unrecorded experience are worthless. They are entitled to more or less weight according to the estimate which we may place on the mental capacity and candour of those who communicate them, and the confidence which we may feel in our own faculties when the conclusions are our own. Therapeutical doctrines have always been, and must for a long period continue to be, to a greater or less extent, based on this kind of experience when they are not purely theoretical, because the results of a better experience are acquired very slowly. This better experience consists in the deductions legitimately drawn from carefully-recorded cases. In this way only can facts be accumulated in sufficient number

for analytical investigation, and in this way only are the errors arising from preconvictions and hasty generalization to be avoided."—*American Journal of Medical Science*, October, pp. 321—336.

EXCERPTA MINORA.

Vast Abscess of the Brain, without Symptoms.—M. Richet related in the Society of Surgery the case of a youth, aged 18, who applied as an out-patient at the St. Louis, on account of a purulent discharge from the ear. So little inconvenience did he feel from his ailment, that he was with difficulty persuaded to enter the Hospital for treatment. With every appearance of excellent general health, he died suddenly next day, immediately after the occurrence of a convulsive paroxysm. At the autopsy, the petrous bone was found diseased, but the dura mater covering it had not undergone any change. The cavity of the tympanum was filled with pus, which obtained its discharge both by the meatus and Eustachian tube. All the convolutions of the left hemisphere had become effaced, and a collection of pus occupied the whole of the sphenoidal and occipital lobes, the parietal lobe remaining alone intact. Very small abscesses were scattered throughout the parietal lobe. This patient had never manifested the slightest intellectual disturbance, and no symptom indicated the existence of cerebral lesion, when the pus, bursting into the lateral ventricle, caused instant death.—*Gazette Hebdomadaire*, No. 46.

Treatment of Cataract by Evacuation of the Aqueous Humour.—Dr. Sperino, of Turin, states that in the course of his investigations on the effects of evacuation of the aqueous humour in the treatment of affections of the bulb of the eye, he has found that if, in individuals suffering from cataract, the aqueous humour be evacuated daily, or every two or three days, the opaque lens gradually re-acquires its pellucidity, the sight as progressively improving. Even in those cases in which complete success is not attainable, by means of this evacuation, this, by ameliorating the condition of the vascular functions of the interior of the eye, places the individual in more favourable conditions for the subsequent performance of an operation. However, in many cases the success has been complete; and, contenting himself at present with announcing the fact, Dr. Sperino is about to publish an account of the researches which led him to the discovery of the mode of procedure, and of the relative amount of success which attends its employment in the different forms of cataract.—*Union Médicale*, No. 143.

English Surgery and the French Academy.—M. Léfort, one of "Young France," who admit that there may be procedures worthy of imitation beyond the borders of their own country, recently laid some facts before the Académie de Médecine, tending to show the success which has attended excision at the hip-joint in England; as also to exhibit the fact that far less mortality results from operations of all kinds, which are performed in the English, as compared with the French Hospitals. M. Velpeau, as became a veteran of the old school, stoutly opposed the admission of such new-fangled ideas, and declared that if the English figures be true the result should be explained, not by the difference in the regimen to which those operated upon are subjected in France, nor to the antihygienic condition of the Hospitals of that country, but to "a kind of immunity in favour of the flesh of the English, which, by some kind of physiological privilege, is more refractory than is French flesh to the accidents which follow great operations"!! All the speakers of the Academy, MM. Gosselin, Larrey, and Malgaigne, joined in repudiating this operation; and M. Velpeau explains the difference of opinion which prevails among French and English Surgeons on this matter, by the hypothesis that English Surgeons are less Physicians than the French, *i. e.*, less accustomed to study the natural course of disease, and to rely upon the resources of Nature. They are more active and more enterprising, having their instruments always in hand, these being with them the *ultima ratio* of our art. During the last sixty years there has prevailed in France no line of demarcation between Surgeon and Physician, both submitting to the same tests and receiving the same University titles. This is not, as yet, the case in England; and to this is to be attributed the boldness of the Surgeons there, and their tendency to adopt operations which cannot become naturalised in France. [Yes, we fear not a few are allowed to linger in misery and to die, in France, who might be treated with advantage, merely because the *modus operandi* is not of Gallic origin; and it would be difficult to say which national trait is most marked, the credulity of John Bull, who receives with open arms every suggestion and statement, however absurd, from abroad, or the utter non-receptivity of the Frenchman, who, boasting of leading the world, is often actually a century behind its practical teachings. M. Velpeau's sneer at the alleged addiction of the English to the operative procedures comes ill from a city in which complicated and impracticable instruments are of daily invention, and most hazardous operations of too frequent occurrence.]

FOREIGN AND PROVINCIAL CORRESPONDENCE.

GERMANY.

Vienna, December 7.

THE HOT-WATER CURE.

There is nothing so very new in a cold water dressing. Our fathers practised it before us, and so do we; and however much laughter we may have enjoyed at the expense of the cure-all Hydropathist, there is no doubt that all Practitioners, from Hippocrates downwards, have been partially prone to cold water. But of hot water, internal and external, and crises! Of hot water we can promise you, at least, enough for some time to come. Crises should have a special letter reserved for them: at present I will only premise that a crisis is a term whereby the Medici Balneorum recognise any outward and visible sign of the inward and spiritual working of the waters.

It is for the most part an eczema which is thus interpreted, and the consolation afforded by this explanation should seem to be sufficiently great to make most patients resign themselves to an ill-tempered satisfaction at the vice which they believe they see thus working out of them. The whole matter is highly instructive, especially so from the insight it affords us into the frailty of most Medical reasoning. Have you heard of irrigation as practised by Langenbeck, Stromeyer, and Friedberg? It again is a Gothic mode, as its name implies, of throwing cold water upon people compared with what has been of late sometimes practised in England. Allowed, however, that there is nothing new under the sun, and I still think that Professor Hebra, of Vienna, has the honour of having discovered an application and adaptation of the water cure which is likely to prove no little boon to suffering humanity

The complete immersion of the body in water persisted in for weeks and months continuously is an experiment, so far as we know, completely novel of its kind, and both for its novelty and for the physiological questions which it involves, likely to prove interesting to many of your readers. "Experience had taught me," writes the Professor in the paper he has just made public ("Ueber continuirliche Allgemeine Bäder und deren Anwendung bei Behandlung von Verbrennungen") "that the nature of our epidermis was the cause of the development of many of our skin diseases and the source of their long duration. And when I compared the eruptions," he continues, "which came out in the course of one and the same disease, upon the mucous membrane and upon the skin, I perceived that although the morbid matters deposited in both took origin from a like source and appeared at a like time, bespeaking an essentially identical process, yet those upon the skin took a long time in their involution, while those upon the mucous membrane, covered with a delicate epithelium and kept constantly moist, ran through their course with very far greater rapidity. The varioloid eruption, which I will select for example, presents upon the mucous membrane of the mouth and throat only small white prominences consisting of macerated epithelium which have no pus contents, extend no depth at all, and never ulcerate, being at the most mere superficial excoriations of the most temporary kind; whereas, upon the body at large the whole skin becomes the seat of deep pustules or even foul sores. Now, the explanation of this difference is to be sought partly in the thickness of the epidermis as compared with that of the epithelium layer, but

beyond this in the constant maceration of the mucus in antithesis to the dry and horny condition of the epidermoid surface."

The fact of the varicloid eruption again running its course so much more rapidly and kindly when it was macerated by an oil or water application or covered by empl. hydrarg., confirmed the Professor in the opinion which he had formed, and to the varioloid proposition he appends the following corollary:—"That to the healing of many chronic skin diseases nothing further than a constant maceration of the epidermis was often indicated, which in facilitating the escape of the morbid products whether these were serum or pus corruption or blood, should thus prepare a way for the restoration of a more normal surface."

Moreover, that a maceration of the epidermis is the necessary item in the healing of most skin affections may be deduced from the circumstance now well-known, that applications of the most heterogenous descriptions have been made to diseased parts of the skin, and been found to exert pretty equally favourable results. Thus, it is often of no moment whatever to the cure whether the patient be treated to cold or warm poultices, ice or cataplasms, whether simple sweet-oil, cod-liver oil, glycerine soft soap, or any other liniment be rubbed in; whether the unfortunate be tarred or greased, inuncted with lead mercurial, borax, or iodine ointments, plastered black or white, yellow or green; no, nor whether these various preparations be administered by the most learned of Physicians or by an old woman. All have brought about cures, and therefore all have more or less right to admission into the Pharmacological Treasury. Not that by any means he intends that all these can be used indiscriminately. "I know," he says, "only too well how different they are in their further workings, and with what circumspection the remedy should be suited to the special disease and to the temperament of the individual, but the way in which they all work is the same, all have one idea in common, and this it is which their very variety brings us to a recognition of. Each and all exert their influence simply and alone upon the epidermis."

I believe all Doctors and all Surgeons to be agreed at least upon one point, to be allied against one enemy whom they can hate and complain of in common; the enemy is pus: his movements are only lauded when he is beating a good retreat, whether below or above boards, under the epidermis or upon the cutis, from which the epidermis has been stripped, he is known as an oppressive tyrant laying a heavy tax upon the country he occupies. A fiery halo circles round his camp, and his scouts go forth as sure emissaries before him, spying out the nakedness of the land. He is like a certain potentate, always rectifying his frontiers, and mapping out beforehand the lines he means to take possession of.

But from figure to fact in abscess or pustule, the immediate local disturbance pus creates is not insignificant, while the general is sufficiently well known to be well dreaded under the term Pyæmia. If, then, we are in a position, and by the use of the continued warm bath it can be shown that we are by macerating the skin to evacuate the pus in it, and if the same means, by preventing the access of air, delay decomposition *in situ*, of a truth have we fulfilled the indication to which Theory and Practice alike bid us. "Now extensive burns and scalds present us the indications for the treatment we propose," says the Professor, "in the highest possible degree, the objects being, 1st, to effect the maceration of the seat; 2nd, to protect the system from the deleterious influence of the foul pus; 3rd, to spare the patient the grievous pain produced by the changing of his dresses, the baring of his sores, and the incidental movements of the affected parts; and, 4th, to obviate that rapid loss of the animal heat brought about by the destruction of the epidermis, whose office as a bad conductor regulates, as is well known, the body's temperature in health,—a measure readily effected by bringing the surrounding medium to a corresponding warmth."

Having premised thus much, the following questions presented themselves, which experiment alone could answer,—viz. How long a sick or sound individual could be kept in a warm bath without prejudice? What phenomena would come to light, and what influence this procedure would exert upon the general organism?

The Professor had a bath constructed, 6 feet long by 3 feet broad, it was made of wood and lined with zinc; exactly fitting its interior was an iron frame-work which supported the ordinary undergirths of a bed; at about 2 feet from one end of this frame was attached a back support which moved on a hinge, and by means of a simple piece of rack-work could be fixed like a music-desk at any slope the patient found most comfortable, while the whole bed covered with a blanket and rejoicing in a horse-hair bolster, hung suspended in the bath by bands attached to both its extremities; two small rollers with handles attached were carried by the bath case at head and foot and received these bands, and thus enabled the bed to be raised or lowered at pleasure.

At the head of the bath, and standing higher than it, was a small copper boiler, which supplied the water at whatever temperature was required. The supply pipe entered at the bottom, the escape pipe left it at the water level; when in use the stream was kept constantly running, and thus all impurities were rapidly washed away.

Case 1, March 21, stands thus:—"The bath, which held about sixteen buckets full, was filled, and, by a Berzelius lamp set under the boiler, the water kept at 28° Réaumur, or 95° Fahrenheit. The young girl who had the honour of making the first experiment was seventeen years of age, and had never menstruated; she was suffering with psoriasis, and had been for some time in the Hospital. She weighed 91¼ Austrian civil pounds. Her pulse and the frequency of her respiration were taken, as were the warmth of her skin, the temperature of the water in the bath and of the air in the room. She was left under the charge of a Medical man, whose sole business it was to take a note of her pulse and respirations every hour, and to determine at what temperature the water should be kept. At the expiration of twenty-four hours she expressed herself as very comfortable; she had passed her urine and fæces as ordinarily, and slept, too, as well as the importunate hourly inquiries with which our solicitude had disturbed her would allow of. She was taken out of the bath then, partly because some repairs were needed, and partly because it was wished to give her time to recover herself. Our later experience that a twenty-four hours' stay in a bath left no fatigue to be recovered from had not then been gained. It was impossible to institute the next trial before April 15, when, however, the patient was kept thirty-six hours in the water; and again on the 29th—for we had now become bolder—the bath was prolonged to forty-eight hours. At the end of each experiment the patient was found to have lost weight somewhat, which loss in all, up to May 1, amounted to four civil pounds. The effect of this prolonged bath upon the patient's skin was astonishingly unimportant; it was not more soaked than one hour's stay in the water would have made it. The epidermis of the fingers and toes was wrinkled up, and of a white colour, and could be readily peeled off by rubbing. In the sound parts there was nothing particular to be remarked, but the psoriasis patches were softened, and their scales easily stripped off. The usual fluctuations which are well known to take place in the pulse, such as its greater rapidity by day than by night, and its quickening by from eight to twelve beats after a meal, took place just as regularly in the bath as independently of it."

Case 2.—On May 27, a washerwoman was admitted, extensively burnt all over her body from her clothes having caught fire. The accident had happened on May 19. The calves of both legs posteriorly presented wounds eight inches in length by about five inches in breadth; upon the sides and posterior surfaces of both thighs, as upon the seat and back, were burns more or less scattered about. On admission, some of the sores were covered with firmly-adherent scabs as thick as one's finger. Her knees were bent, her thighs drawn up, and when taken in she was quite unable to stretch her legs out; she was rolled up into a ball, and could neither stand, nor sit, nor lie down straight; she complained of intense pain, and shrieked out whenever her wounds were touched. Pulse 120. She was weighed (weight 89 civil pounds), and put at once into the bath bed. The water was raised to what temperature she asked for; this was 30° Réaumur (99° Fahrenheit), and kept at this warmth. She had been scarcely an hour in the water when she could stretch her legs out, assuring us that she had not a trace of pain in her sores. She was going on as well as could be up to the evening of June 1, when at eight p.m. she had an epileptic seizure, which lasted a quarter of an hour, and between this date and the morning of the 3rd she had three more fits. Owing to our patient's understanding German very little, and being further of defective intellect, we had been

unable to obtain any complete history, and so were not in a position to know whether she had been previously epileptic, or whether this disease now manifested itself for the first time when she was in the warm bath. However, we did not desist from our experiment, only she remained in the water under strict Medical guard; and upon June 3, when she had had six fits in the course of the day, we ordered her to take five drops daily of an atropine solution. (Atrop. sulphat., gr. j.; spirit vini rectificat., gr. 500.) For nine days she had no further attacks; but these came back again on the 12th, and continued off and on until September 30, although she still went on with the atropine. "We mention this occurrence" (*zwischenfalle*), writes the Professor, "because a good many people might perhaps have desisted in consequence, and have drawn a hasty conclusion in disfavour of the continued bath, which we did not. A little later we were confirmed in the rectitude of our surmise; for we learnt from one of her own countrymen that she had been for years the subject of epilepsy: it is plain, therefore, that the bath was no way guilty of having brought this on. And now from the epileptic episode to the results of the experiment. The most striking phenomena took place in the course of the first forty-eight hours,—the patient's pulse fell from 120 to 80, while appetite replaced the previous thirst. Indeed, if we except the epilepsy, the case did as well as it was possible for so severe a burn to do. She suffered no more pain; even the touching her wounds under water hurt her very little, although out of water this gave her the acutest torture. The scabs, where there were any, came away, while the wounds began at once to heal from their peripheries. Altogether, she was so comfortable, that we had no grounds for taking her out of the water, in which she remained up to June 18 (twenty-one days and nights). We have only to remark, further, that as the wounds progressed to healing, her body reasserted its power of preserving its own natural warmth (the thermometer marking 28° R. 93° F. in the axilla), and she bore the bath at a proportionably lower temperature; so that by degrees, to suit her comfort, the water came to be lowered to 25° R. 88° F. On June 18, the patient was obliged to be taken out of the bath; for the ward had to be converted into a male ward, and our apparatus was not of the most portable; this, too, could be done now without any great harm, for the largest wounds only presented a thaler-sized space (a crown-piece) that was not yet skinned over, and she could go about without pain."

We have had two cases—the first remaining 98, the second 504, hours in the water; the third was to be made a very fish of, as you will learn:—

Case 3.—"William I. was a factory lad, aged 17, who had been for one and a-half years the subject of pemphigus. His body was covered with partly serous- partly pus-containing bullæ, his hands and feet being the parts most affected. He could not stand, and his sufferings became only aggravated when he was in bed, for the bed-clothes rubbed him above, and his own weight pressed upon some tender part below, howsoever he lay. The temperature of the air was 17° R., 68° Fahr.; that of the bath, 30° R., 99° Fahr., when, upon the morning of June 25, he entered it for what was to be a 2400 hours' sojourn therein. The thermometer marked 101° Fahr., 31° R. In his axilla his pulse was 130, his respirations 24, and his weight 81¼ civil pounds, before he was put into the water. For 100 days—that is, from June 25 to October 2—notes were taken four times every day upon the points above mentioned, viz. at seven and ten a.m., and at four and eleven p.m. They were kept in the tabular form, with a careful record of the other phenomena which arose, and from them the following facts are abstracted:—The pulse, which, at the commencement of the experiment, was recorded at 130, always became more rapid upon the outbreak of a fresh crop of bullæ; this happened eight times—on July 25, 30, August 3, 23, 25, and September, 8, 17, 23, respectively. Once the pulse rose to 144, and this was when it had wavered between 104 and 120 before the eruption. For the remainder of the time, so long as affairs stood still and no fresh bullæ came out, the pulse only varied between 68 and 80. It should be mentioned here that the mean pulse during the first month, July—August was much higher—nearly 88—than it became lower, 76. Indeed, its frequency throughout the duration of the experiment steadily went down. Again, of the respirations: these ranged through from 15 to 32 per minute; the mean of the first month gave 24, that of the last, 20. The temperature of the body, taken always in the axilla, presented very insignificant variations; it ranged only between 95° and 101° Faht. The temperature of the water and of the air experienced very little change, for it was easy enough to keep the former regular, and the weather throughout the summer months was pretty equable. The water, kept always as warm as he wished it, gave at its highest 99° Faht., at its lowest, 88° Faht.; the patient always desired it warmer by day, cooler by night. His weight at the commencement, on June 27, was 81 civil pounds. After the first forty-eight hours it was found to have fallen to 80 civil pounds, but from this time it steadily increased again, and on July 17 was 83 civil pounds; on the 28th, 88; on the 31st, 89; August 12, 90; September 2, 93; October 2, 95. Thus, in a hundred days, he gained 14 civil pounds. Only once his appetite failed; it was upon that day which we have spoken of above when the pulse and respirations rose to their highest upon the outbreak of a fresh crop of bullæ. At any other time it was not only good, but so good that we were obliged to order him extra beer and bread beyond the full Hospital diet; we granted it partly to keep up his strength, partly to keep up his good humour, that he might fulfil our experiments patiently. The patient preferred getting out of the bath to pass his evacuations, although this was not necessary, for by the roller apparatus previously described he might always have been raised above the water for this purpose; throughout they were normal. The urinary secretion was very copious, but unfortunately was not so closely examined as its physiological interest merited."

We had ourselves an opportunity of seeing this patient in the bath on the day before his return from what cannot but be considered a pretty close imprisonment. The pigment stains all over his body showed us how extensive and how severe the eruptions had been; but he was then without a fresh spot about him. We asked him how he had liked his treatment; he spoke of it as a dull way of passing the summer, "A little more companionship," said he, "had made it far more agreeable to me." Six weeks have just passed over, and he has re-appeared, together with his pemphigus, and has been re-committed to his watery bed. Are we to conclude that there has been nothing gained? Heaven forbid! The Professor never proposed to himself a specific cure for the disease in his continued bath. It was enough that he had alleviated great suffering, and restored for the nonce to apparent health one who had been a very Lazarus.

BIRMINGHAM.

December 7.

Ovariotomy, here as elsewhere, is just now *the* question. The opinion is gaining ground that the operation is one of the most legitimate and valuable in major Surgery, and that those who have by their labours raised it to this position, have commensurately enhanced the dignity of our science and the usefulness of our art. It is generally admitted that Professor John Clay's elaborately erudite appendix to his translation of Kiwisch has powerfully influenced Professional opinion in this direction, but only those who have attended the animated debates of the Midland Medical Society can justly appreciate the effect of Mr. Clay's clear and demonstrative replies to pre-occupied objectors. The question has been re-opened in connexion with two cases which were operated upon in the Queen's Hospital by Mr. Sampson Gamgee, on October 10. In one the multilocular tumour had existed nearly eight years. The belly was of enormous size, and hung over the upper third of the thighs. Adhesions proved universal, but after death, which occurred from shock in sixteen hours, it was found that no viscus had been injured or displaced in their separation. All the organs seemed packed away and cemented down in a bed of old lymph, out of which the tumour may be said to have been enucleated. It sprang from the left ovary and had a pedicle of fair length. The other case was a tumour of the left ovary, the size of an adult head, complicated with ascites. The substance could very readily be made to move about in the fluid, but it was found to have contracted two very important adhesions to the omentum, each of which required ligature before division. A sharp attack of peritonitis supervened, followed by pelvic

abscess which evacuated itself along the pedicle. This complication overcome, broncho-pneumonia imminently threatened the patient's life, but she is at present progressing most favourably towards complete recovery.

The debated question of adherent vesical calculus has received elucidation from an operation, as remarkable as it has proved successful, which Mr. Oliver Pemberton performed in private practice, on August 13 ult. The patient (male, aged 47) had for twenty years been labouring under aggravated symptoms of urinary calculus, terminating at last in urinary and fæcal fistulæ, through which, as by the natural meatus, the water had dribbled during the last six years. The bladder having been opened in the ordinary way with the single knife, and a large stone grasped in the forceps, without the presence of any urine, great difficulty was experienced in bringing it away. The finger detected the bladder above and below intimately adherent to the stone, from which it was only peeled by the exercise of considerable force. The stone removed, to its under surface—corresponding to the "trigonum vesicæ"—was seen adhering a piece of mucous membrane of the size of a florin. This was with great difficulty separated from its attachment to the stone, its fibres having penetrated, and intimately adhered to, the roughened surface. On closely examining the adherent portion of mucous membrane, it was seen to consist of the entire coat, somewhat thickened, and its centre was perforated by a rounded aperture, capable of receiving the point of a probe. It was obvious that a part of the bladder immediately adjacent to an urinary fistula had been removed with the stone, which, with the adhesions contracted, had effectually closed a pre-existing communication between the bladder and the rectum. The patient recovered without a bad symptom, save what belonged to two most vigorous attacks of gout. The stone was an unusually rough one, weighing upwards of two ounces and a-half, and of the lithic acid character.

Amongst a number of highly instructive cases in Dr. Russell's Clinique at the General Hospital is the following:—The patient, a striker, had been losing muscular power in his right arm for eight or nine weeks before admission, when it was ascertained that the upper and fore-arm had each lost an inch in girth. The muscles of the thumb were affected to an equal extent; radial artery tortuous. He had almost lost the grasp of the right hand, that of the left remaining perfect. The man was anæmic; sounds of the heart feeble. He had been doing much extra work, often labouring fifteen hours in the day, and had lost an unusually large amount of blood from piles, to which he had been long subject. He is rapidly recovering under good diet, rest, friction, and strychnine.

Another case of muscular atrophy, under Dr. Russell's care, likewise deserves notice. Wasting of the left lower extremity, attended with severe pain in the muscles, was attributed to pressure from an aneurism probably arising from the common iliac artery. The leg had lost one inch, the thigh three inches, in girth; the temperature of the leg and foot sensibly lower than on the opposite side. The pulsation of the femoral artery could not be felt; and in the left lumbar and iliac regions was a very large pulsating tumour, without bruit or thrill. The man, a very dissipated character, was seized quite suddenly, six months ago, with acute pain in the anterior tibial muscles in walking, together with deadness of the foot. He never regained the power of walking. The action of the muscles was often very painful, and the region of the hip, as well as the extremity, the seat of much neuralgia.

A Memoir on the Action and Uses of Atropia, from the pen of Dr. Fleming, is said to be forthcoming, to be followed, it is to be hoped, at no very distant period, by a general exposition of the Author's extensive studies and experience in Therapeutics. He gives the atropia in solution thus:—Atropia, 1 grain; distilled water, 5 drachms. Dissolve thoroughly with the aid of a few drops of diluted muriatic acid, and add of rectified spirit sufficient to make 10 drachms. This solution represents all the medicinal virtues of belladonna; it keeps well; and being of uniform strength, is superior to the very uncertain tincture and extract.

The above solution is so proportioned that ten minims are the commencing dose for the adult, given in a little water, once daily at bed-time, on an empty stomach. The dose is increased daily by two or four minims, until the physiological action of the drug is produced. This is attained with much precision and safety. Dr. Fleming insists on the stomach being empty, or nearly so. The same dose which produces distinct effects, if so taken, produces none on a full stomach.

The more prominent physiological effects of atropia in medicinal doses are dry throat and mouth, difficult swallowing, wide pupil, and dim sight. To these are gradually added frontal headache, giddiness, slight relaxation of the bowels, lessened urine, and increased frequency of micturition, wakefulness, and slight delirium. The following are among the most important of its applications in disease. In epilepsy it is sometimes curative, and rarely fails to afford material improvement. In chorea and neuralgia often useful, but, on the whole, less so than other medicines. In asthma it often gives great relief; but its value is, perhaps, most strikingly shown in relieving constipation, and in subduing irritability, congestion, and inflammation of the urinary systems. Hence its utility in irritable bladder, incontinence of urine, spermatorrhœa, irritable uterus, dysmenorrhœa, and other affections of those organs. Additionally, Dr. Fleming has seen it act as a parturient, with a promptitude and efficiency which he charaterises as unequivocally superior to the ergot of rye. To avoid delay in inducing this effect, the drug is introduced into the cellular tissue, the solution employed being made of the same strength, but without spirit.

One of those cases of intestinal obstructions which are apt to baffle Physicians the most skilled in diagnosis and treatment, has recently been under the care of Dr. Foster in the Queen's Hospital. The patient, a man about 30, had no history of stricture of the rectum, while his ruddy appearance contra-indicated cancer. He had been under treatment for constipation about a week before admission, and in the Hospital he was submitted successively to all the remedies which are held in estimation under similar circumstances;—vomiting continued with little interruption, the obstruction of the bowels persisted, there was no sign of hernial protrusion, the abdomen was very tympanitic, the course of the colon prominently marked on the anterior surface, and there was slight fulness in the left loin. As the general powers gradually failed to so low a point as to inspire serious doubts for the man's life, it was resolved (the 19th day of the obstruction) to open the descending colon by Amussat's method. The operation was performed by Mr. Gamgee about three weeks since. It appeared a very simple proceeding and proved completely successful for the attainment of the immediate object. Within twenty-four hours an immense amount of fæcal matter was discharged through the lumbar incision, and the man had rallied. His subsequent suffering has been very trivial. The sutures have been removed, no peritonitis has supervened, the appetite is good, the food well digested, and during the last two or three days flatus has passed per anum. Whatever the issue, I shall endeavour to ascertain, to report in a subsequent letter.

A skin disease amongst the pauper inmates at the Birmingham Workhouse has been the object of considerable discussion during several months. It has been surmised that it was itch, but the diagnosis "Eczema" prevailed. In May last the guardians submitted the whole question of the sanitary state of the Workhouse to eminent referees, and they reported prevalence of eczema, absence of scabies. Mr. Edmund Robinson having been appointed Resident Medical Officer to the Workhouse toward the end of October, appears to have acquired the conviction that the disease then prevalent was itch. He examined all the inmates, and noted upwards of 250 which he considered to be well marked cases of the disease. He first submitted isolated cases to sulphur inunction, and, finding it successful in curing the affection, he organized a system by which the patients are submitted to treatment in large groups during two days. The therapeutic test has been perfectly conclusive of the accuracy of Mr. Robinson's diagnosis and of the judiciousness of his treatment, and his efforts have been further rewarded by discovering the "Acarus Scabiei."

Loss of several teeth, with exfoliation of a considerable portion of the upper jaw, after measles, has occurred in one of Mr. S. A. Parker's hospital patients. Another has afforded a typical illustration of the abscesses and fistulous openings produced, and so obstinately kept up by diseased stumps, the removal of which is the only hopeful method of cure. In proportion as Dental Surgery has acquired a scientific and independent position, the diseases of the teeth have fallen

less and less under the notice of the general Practitioner. Nevertheless, it is very important that students, especially those destined for the public services, should have the opportunity of acquiring a fair knowledge of the specialty. Such an opportunity was afforded by Mr. Parker when he founded the Dental Dispensary, a wise and successful step, to which is doubtlessly referable the fact, that already two of our Hospitals have Dental Surgeons attached to them; to that for Sick Children, Mr. Thomas Howkins; to the Queen's, Mr. S. A. Parker.

GENERAL CORRESPONDENCE.

"THE LIABILITY TO SMALL-POX AND TO VACCINIA IN ANY GIVEN PERSON ARE EQUAL," OR, "WHAT IS A MAN'S SECURITY AGAINST SMALL-POX?"

LETTER FROM DR. DRUITT.

[To the Editor of the Medical Times and Gazette.]

SIR,—I will ask your readers' assent to this proposition: Whoever can take small-pox, can also take the vaccine disease. Whoever cannot take the one is also protected from the other. The greater the susceptibility of any person to one, the greater it is to the other also. There appear to be some persons so constituted, that they resist the vaccine disease. There are likewise some so constituted that even unvaccinated they never take small-pox. Conversely, they who are susceptible of small-pox are so to the vaccine influence. A man who has had small-pox once is liable to it again, just as in the same degree as if vaccinated he would be liable to the vaccine disease again, while some persons are liable neither to one nor to the other. If this proposition in its various forms be true, it suggests a caution.

The Statistical Report of the Army Medical Department for 1859 contains some tables which afford materials for the following calculations, which illustrate what I want to point out. It seems that 32,510 soldiers and recruits were vaccinated during fifteen months from October, 1858, to December, 1859. These are divided into four classes:—1. Those who bore marks of previous small-pox, amounted to 4124. Curious this, that an eighth of the flower of our male adults of the working classes should still be marked with small-pox! 2. Those who bore good marks of previous vaccination, were 23,924, or about three-fourths, which is on the whole satisfactory, and tells a good tale for the vaccinators. 3. Those who bore doubtful marks of previous vaccination, were 1901; and, lastly, those who bore no marks of previous vaccination nor small-pox, were 2561.

If we reduce these numbers to an uniform scale, we find that of the 32,510 soldiers vaccinated,

Those who had small-pox marks were .	per 1000	126
,, ,, marks of good vaccination . .		736
,, ,, doubtful marks of vaccination . .		58
,, ,, neither vaccine nor small-pox marks		78

This gives a valuable, and on the whole, satisfactory account of the state of our labouring population, so far as regards vaccination. It may be presumed that in higher ranks there are none without vaccine marks.

Now, when we come to the results of the vaccination of these 32,510 persons, if we were to go by the common theory, we should expect that the persons who bore marks either of small-pox or of good vaccination would almost uniformly be insensible to the fresh infection, and that the persons with doubtful marks or none would uniformly take the vaccine well. How curiously we should be disappointed is evidenced from the following statement:—

Out of the 4124 persons with marks of small-pox, the number who when vaccinated showed perfect vesicles was 1473, or per 1000	357
Modified vesicles were shown in 799, or per 1000 . .	193
A failure in 1852, or per 1000	440
Secondly. Out of the 23,924 persons with good existing vaccine marks, the number who when re-vaccinated exhibited perfect vesicles was 8976, or per 1000 . .	375
The number who gave modified vessels was 5277, or per 1000	220
A failure in 9671, or per 1000	404
Thirdly. Out of the 1901 persons with doubtful marks of vaccination, the number who gave on re-vaccination good vesicles was 777, or per 1000 . . .	408
The number who gave modified vesicles was 505, or per 1000	265
A failure in 619, or per 1000	325
Fourthly. Out of the 2561 persons who had marks neither of small-pox nor of vaccination, and who (by common theory) might be supposed quite unprotected, the number who gave perfect vesicles was 1362, or per 1000	532
Those who gave modified vesicles were 484, or per 1000	189
A failure in 715, or per 1000	235

These tables, compared with those of the results of re-vaccination in the Wurtemberg army, show us pretty exactly what is the amount of protection against small-pox actually existing in the case of the male adult population, assuming, as we are bound to do, that protection against small-pox and insusceptibility of vaccine disease are identical. Out of any number of men who have small-pox marks, the number protected is 44 per cent., while 56 per cent. are still liable to it in some form or other. The figures yelded by the Wurtemberg statistics are identical—44 and 56—and, therefore, these proportions point to something like a law.

Out of any number who show good vaccine marks, the per-centage absolutely protected is 40 or 41, whilst 59 are in some degree liable. Here, too, the figures of the Wurtemberg army are identical—40 and a fraction and 59 and a fraction; so that this looks like a law.

Out of any number of men with imperfect or doubtful vaccine marks, the per-centage of protection is 33, whilst 66 are liable. (The Wurtemberg figures give 46 as the number protected.)

Out of any number of unvaccinated men who have never had small-pox, only 23 per cent. are insusceptible, 77 are liable. Here, too, the Wurtemberg tables differ, giving 47 as the per-centage of protection.

In the foregoing observations it is assumed that vaccination has never been repeated.

From these data, and others before the Profession, we shall surely be justified if we drop a little from the unqualified tone in which it is customary to speak of vaccination, as if it were an absolute protection, and as if it ever could exterminate small-pox. And by being careful to define its true value, we should not run the risk, which we do now, of damaging vaccination, and producing reaction against it in the vulgar mind, because it does not effect all that we promise of it.

I repeatedly meet with such histories as these:—A youth, aged 14, was taken ill with small-pox. After three weeks his three brothers sickened of it likewise. All had been *well* vaccinated, but the only one who had it *severely* was one who had been vaccinated by a well-known public vaccinator in Marylebone, who pronounced the "arm" a remarkably fine one, and, in the excess of his zeal, said to the mother, "Well, Madam, if ever your child has small-pox after such an arm as that, I shall call vaccination a humbug." A conclusion which an uneducated person would be very liable to adopt.

Surely it would be better to state frankly that vaccination is proved to hinder small-pox from destroying life, good looks, and eye-sight; but that if 1000 vaccinated boys grow to manhood, 600 of them will still be liable to a modified attack of small-pox, unless they are vaccinated again.

Then, if asked, as we often are, "Would it not be better to have small-pox at once?" The reply will be, that small-pox gives but three per cent. more protection against a second attack than vaccination does. I find it recorded in one of the Reports on the Health of St. George's Hanover-square, that four children in one family had small-pox. "They had all been vaccinated in early life, and their arms present perfect models of cicatrices; but it must be added that the only one of them who had the disease severely was Jane A., who had had it once already, after vaccination."

It must also be borne in mind, that some persons are so constituted that they take vaccine and small-pox readily, again and again. The figures at my command are too small to prove it, but I have no doubt that every case of death from small-pox after vaccination, may be matched by one from secondary small-pox.

Others take em with the greatest difficulty. Hence some

little prudence is requisite in speaking of "imperfect" vaccination and ill-developed cicatrices. These are due to the insusceptibility of the patient, rather than to the unskilfulness of the operator. If once good vaccine matter be inserted, the result, whether a good cicatrix or bad, is out of the operator's control.

The sum of what I desire to say is, that the susceptibility to small-pox and to vaccine being equal, and the protection afforded by either being incomplete, the public should be frankly enlightened on this latter point, and should be encouraged to repeat vaccination periodically. Systematic National *re*-vaccination is almost as much a necessity as the primary operation. I am, &c. R. Druitt.

37, Hertford-street, London, W., December 3.

METHYLATED SPIRIT.

Letter from Mr. Glascott R. Symes.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your impression of the 30th ult. you advert to the practice of substituting methylated spirit for pure spirits of wine in the preparation of drugs. My attention has been directed to this subject much of late, in my endeavours to reduce our medicine bills which formerly ran very high. After repeated attempts to get rid of the disagreeable smell, we gave up the idea of using methylated spirits in the manufacture of tinctures intended for internal use. It produced great nausea, the patients in some instances refusing to take their medicines. However, there is no objection to its use in the manufacture of tinctures intended for external use, or in the preparation of liniments. We use large quantities of a mixture of soap liniment and tincture of aconite in our Dispensary. No charitable institution could stand the expense unless these were prepared with methylated spirit. In the manufacture of alkaloids it can be used as effectively as pure spirits of wine. As regards chloroform prepared with methylated spirits, you seem to have the same objection to its use that I myself had at one time, and which was chiefly induced by observing how disagreeable it was in tinctures made for internal use. Two substances are mixed with the spirit to render it objectionable, viz., naphtha and some resin, shell-lac most probably. The former being volatile, cannot be removed by distillation, but the latter can; I am strongly of opinion that it is the resin which renders the spirit unpalatable. In the manufacture of chloroform this latter substance is got rid of, and we have now merely the naphtha to account for. It must either exist in the chloroform as naphtha, or must be decomposed during the process into some other compound; if the first view of the case be right, its presence cannot produce any deleterious effect, otherwise it would not be so extensively used by some Physicians; if the second be the correct view of the case, and that some new compound is formed, though I am not good enough Chemist to investigate the change that takes place, yet I can promise you that it does not act injuriously on the animal economy. Acting in accordance with the foregoing line of reasoning, and on the motto "Experimentum fiat in corpore vili," about nine months ago I commenced using methylated chloroform, purchased at the shop of the Apothecaries' Hall Company, the saving is but 4s. per pound, so that I do not prefer it for economy, but because I think it preferable to any other kind. Since that period I have used it in 150 cases, at least, and on no occasion had I anything approaching an accident as it is called. I found it remarkably speedy in its action, knocking the patient down in a minute and a-half. Females and young persons were placed under its influence in an incredibly short space of time. In my situation as Junior Surgeon it devolves on me to administer the chloroform in every case, unless when I am operating myself, the method I adopt is as follows:—I procure a clean towel and stitch it up in the form of a cone, I pour into the apex about three drachms of chloroform, I then hold it tight over the face of the patient, preventing as much as possible the admixture of the vapour with the external air, unless it produce coughing, in a few seconds the patient will sing out as the stage of excitement comes on; when he suddenly ceases I withdraw the towel, place it beneath the table, and the operation is proceeded with; if requisite the chloroform can be administered again. Some persons keep the hand on the pulse, should it get weak or intermittent the towel is immediately withdrawn, however, if the heart have been previously healthy, the patient will now be sufficiently unconscious to stand the operation. I find by using the towel the chloroform is farther removed from the face; I imagine there is just enough air in the towel for the proper dilution of the chloroform if that really be necessary. Of course no patient gets chloroform unless his lungs and heart are healthy, he must not have eaten a meal for at least eight hours previously, nor do we ever give it but in the recumbent posture. My colleagues have frequently borne testimony to the safety and efficacy of methylated chloroform; out of all these cases I never saw but one case of sickness of stomach.

As regards the Excise view of the question, I think there can be but one idea,—there ought to be no duty on the necessaries of life; let them take its luxuries and superfluities if they will, spirits of wine, rectified and converted into some of its more agreeable forms, as brandy, whiskey, gin, etc., is a luxury, but when it is made into medicinal tinctures it is far removed from that category. The Government allow of the sale of a spirit without duty to Druggists for making varnishes, etc., these come under the head of superfluities and ought to be taxed, whereas they will not allow us to use a spirit for the preparation of medicines unless the full duty be paid. An exception ought to be made in this respect, it would work beneficially, and then we should have no complaints of tincture made with methylated spirit or what is more common in this country, "Poteen."

I am, &c.

Glascott R. Symes,
L.K. and Q.C.P.I., L.R.C.S.I., A.B.T.C.D.

Dr. Steevens's Hospital, Dublin, December 2.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 26.

Dr. Babington in the Chair.

Mr. Thomas Nunneley related a case of

CONGENITAL MALFORMATION OF THE EYES IN THREE CHILDREN OF ONE FAMILY.

During the summer of 1860 a young lady, aged 15, was brought to the Author. She had recently been sent to a boarding-school, where it was noticed that the sight was defective, and that application to books caused pain in the eyes, which soon became inflamed. Mr. Nunneley found both globes smaller than natural, not perfectly round, but somewhat flattened and rather soft to the touch. The sclerotic coats were vascular; the corneæ conical; the irides thin, dull, and tremulous; the pupils considerably towards the nasal side of the centre, and very imperfect in action. Both eyes were myopic. The left eye was in all respects worse than the right. By attention the inflammation soon subsided, and she is now able to read and sew with comparative ease. An elder sister who accompanied her had a similar congenital condition of the eyes but in a much less degree. In a brother, then thirteen years of age, the Author found a total absence of the iris in both eyes. The ciliary processes, if at all developed, were so in a very slight degree. The choroid appeared normal; in an ordinary light, of a dense black; in a reflected light, the vessels were seen to be well developed. The retinæ seemed to be natural, and the lens in each eye was then perfectly transparent. Though no difference could be detected between the two eyes, the sight of the right was more defective than that of the left. The boy had attended the village school, and learned lessons with the other scholars. A strong light was unpleasant, but he did not court darkness. Neither lenses nor diaphragms were of any benefit to the sight. A few weeks after this time the lens in the right eye became muddy, and at the present date lenticular cataract has become fully formed, showing an expansion coequal with the cornea.

The left eye continues in the same state as when first seen. The father and mother have good sight. Some years ago the Author operated for congenital cataract in a first cousin (on the mother's side) to these young persons.

Mr. Soelberg Wells would feel obliged to Mr. Nunneley for information upon one or two points in connexion with these cases, viz., whether the asthenopia in the case of myopia was not perhaps due to insufficiency of the internal recti muscles? By far the greater number of cases of asthenopia were caused by insufficiency of the internal recti, or by hypermetropia. The former affection was chiefly met with in cases of considerable myopia; if for instance the myopia $= \frac{1}{6}$ or $\frac{1}{8}$ (the far point lying six or eight inches distant from the eye), the internal recti muscles were often not strong enough to maintain, for any length of time, the requisite convergence of the optic axes for reading, writing, etc., and consequently symptoms of asthenopia soon manifested themselves. Hypermetropia was, however, a still more frequent cause of asthenopia. With regard to the last mentioned case of irideremia totalis, Mr. Wells would like to know whether Mr. Nunneley had made any examination of the power of accommodation. Such cases were of the greatest interest and importance with reference to the question of the mechanism of accommodation. He himself did not believe that the iris was necessary to accommodation, for this was proved sufficiently by Von Graefe's case of total irideremia, in which, although there was no iris left, the power of accommodation was normal (about $\frac{1}{6}$). Of course, in congenital absence of the iris, there might also be some congenital defect in the ciliary muscle, and consequent impairment of the power of accommodation; the same might occur in cases of traumatic irideremia, if the ciliary muscle were implicated in the lesion; the imperfection of accommodation in such cases, would not, therefore, disprove the theory that the accommodation of the eye was produced by the action of the ciliary muscle.

OBSTETRICAL SOCIETY OF LONDON.

December 4, 1861.

Dr. Tyler Smith, President, in the Chair.

Dr. Harley communicated, for Dr. Newman of Fulbeck, the

CASE OF A PATIENT WHO IN EIGHTEEN PREGNANCIES GAVE BIRTH TO ONLY SEVEN LIVING CHILDREN, THE ELEVEN OTHERS HAVING BEEN EXPELLED DEAD AT VARIOUS PERIODS OF GESTATION.

He (Dr. Harley) remarked that although it was now well known that the fœtus in utero, like the child after birth, was liable to accidental as well as hereditary diseases, the different morbid conditions affecting the former were still imperfectly understood. Sometimes we find on the expelled fœtus direct evidence of the accidental disease under which it has laboured: as, for example, when its skin is covered with a small-pox eruption; or of hereditary disease, as when syphilis is present. In by far the majority of cases, however, no direct or indirect clue to the cause of death can be discovered by an inspection of the child, and we are too frequently forced to attribute the death to syphilis on the one hand (where any evidence of its existence in the parents can be made out), or to some faulty condition of the placenta on the other, even when that is not very apparent. As there can be no doubt that if we knew a little more of the "causes" proving fatal to the child in utero, we might in some cases be able to avert them, every contribution to pathology in this direction ought to be welcomed by the obstetrician. In Dr. Newman's case there is no evidence of either parent having ever laboured under syphilis, or of their being the subjects of hereditary disease. The woman, aged forty-three, has been married twenty-three years, and during that interval has been pregnant eighteen times. Of these, seven children have been born alive, and at the full term; seven dead, at from seven to nine months; four dead, at from four to six months. Of the seven born alive, three only survive, and only the first-born is strong and healthy; of the other two, one is idiotic, the other feeble and always ailing. Dr. Newman remarks that in the first pregnancy alone was the child born in health. The tendency to defective development in the offspring was progressively increased. In every one of the later pregnancies the child has been expelled dead, and the diminution of formative power has been strictly coincident with the decline in the mother's health and strength. In concluding, Dr. Harley cited some cases from a German author corroborative of the same idea.

Dr. Graily Hewitt exhibited a specimen of

ABORTION; RETENTION AND GROWTH OF THE DECIDUA FOR FIVE MONTHS AFTER THE DEATH OF THE FŒTUS.

The case occurred in the practice of Dr. Stewart, of St. John's-wood, who had forwarded the specimen to Dr. Graily Hewitt for examination. The specimen consists of the decidua, greatly thickened; the amnion and the fœtus, the latter shrivelled up, and having the size of a horse-bean. The history of the case made it apparent that the fœtus had ceased to live about April, 1861, when the patient supposed herself to be nearly three months pregnant. On September 15th last, the specimen was expelled, and between April and September there had been a constant discharge of a darkish, thickish, offensive fluid, which, however, was considered menstrual by the patient.

Dr. Graily Hewitt showed, for Dr. Holman, of Reigate, a specimen of

KNOT ON THE FUNIS IN A CASE IN WHICH THE FŒTUS WAS BORN DEAD,

and which occurred in the practice of Mr. Sankey, of Dover.

Dr. Tyler Smith exhibited his

INSTRUMENT FOR THE REMOVAL OF POLYPI OF THE UTERUS.

It consisted of a rod and winch with double canula, made sufficiently strong to carry wire, and bear tension enough to cut through the neck of a polypus at once. In his opinion the best practice was to remove polypi from the uterine cavity, and not to wait until they had been extended into the vagina. Many of the deaths in cases of polypus arose from delay in their removal, causing excessive and long-continued hæmorrhage, or the poisonous effects of the decomposing mass, when the ordinary ligature was used, and many days occupied in cutting through the polypus. With this instrument and a single or stranded iron or copper wire, it was generally possible to remove a polypus in a few minutes, whenever the os was sufficiently open to admit the canula.

Dr. Graily Hewitt communicated, for Dr. Henry Hanks,

A CASE OF UNITED CHILDREN, OR DOUBLE MONSTROSITY.

The children were united from the top of the sternum to the umbilicus; one child measured eighteen inches, the other seventeen. The weight of the two was $16\frac{1}{2}$ lb. They were born dead after a somewhat tedious labour. The heads came first, the forehead of one child pressing firmly on the neck of the child which was most advanced. The mother did well.

Dr. Tyler Smith remarked that the case of Dr. Hanks was interesting as throwing light upon the mechanism of delivery in monstrous births. The common opinion had been that they were delivered by a form of spontaneous involution; but in the present case the head of the second child followed immediately upon the head of the first, filling up the hollow between its head and shoulders.

Mr. Spencer Wells exhibited a

CAST OF THE FEMALE BLADDER

which had been passed through the urethra on the morning of the meeting. The specimen consisted of the whole of the mucous membrane and some portions of the muscular coat of a dilated bladder. Mr. Wells said that it was not uncommon for shreds of gangrenous mucous membrane to be passed in cases of chronic cystitis, and considerable portions have been found detached in the bladder after death, more or less encrusted with the saline constituents of the urine; but he believed that this case—in which a complete cast of the interior of the bladder had passed during life—was almost, if not quite, unique. The patient had been delivered of her first child some weeks before, after considerable force had been used with the forceps for two hours. Symptoms of cystitis came on, the urine became ammoniacal and very fetid, and Mr. Wells had been consulted on account of the cast appearing to emerge from the urethra. The patient seemed to be going on remarkably well.

Dr. Tanner (after inquiring if the patient had been able to pass her urine naturally) said that the preparation which had just been shown corroborated the truth of some remarks he made at the last meeting of the Society, when Mr. Spencer Wells exhibited a bladder which had been inflamed, and where death was thought to have resulted from the non-employment of the catheter. In the present instance there had been no retention of urine, and yet after a tedious labour inflammation had set in, and the entire mucous coat of the bladder had been thrown off.

Mr. S. Wells replied, that the gangrene was due in both cases to cystitis. In the one case, the pressure of the child's head, or of the forceps, might have produced the inflammation, and there was no retention; but in the other, the labour was perfectly natural, and there was retention of urine for sixty hours, quite a sufficient cause of cystitis.

Dr. Harley said that he had examined the urine of this patient some days before Mr. Wells saw her. It contained a very large quantity of carbonate of ammonia, some albumen, some blood-corpuscles, and afterwards a portion which floated on the surface was found to be distinctly chylous.

Dr. Barnes related a case which had recently been observed in the London Hospital. A woman was admitted for the immediate purpose of having a catheter extracted which had been lost in the bladder. The catheter was removed by Mr. Maunder. The patient, suffering from retroversion of the gravid womb, came under the care of the speaker. Some time afterwards the Resident-Accoucheur, while introducing the catheter, felt its point obstructed by a solid substance in the bladder; a portion of this substance appearing at the orifice was seized, and the whole drawn out. It was a large sac, exactly resembling a bladder. Examined by an accomplished histologist, it was concluded to be, not the exfoliation of the inner coats of the patient's bladder, but the bladder of an inferior animal which had been surreptitiously introduced. Upon this point Dr. Barnes did not express any opinion of his own. The patient had apparently quite recovered.

Dr. Priestley said that similar casts of mucous membrane were shed from the interior of the uterus, and Dr. Farre had described cases in which nearly the whole of the mucous membrane of the vagina had been shed; so that it was not surprising that the mucous membrane of the bladder should also be shed. But he thought, as this was one of the first cases, if not the very first, in which such a shedding of the bladder had been actually observed, a careful microscopical examination should be made of the specimen, and the description preserved in the *Transactions* of the Society.

It was ultimately arranged that Dr. Harley and Mr. Spencer Wells should prepare a detailed report on the specimen for the next meeting.

A Paper, by Robert Barnes, M.D., F.R.C.P., was read,

ON A CASE OF PERITONITIS CAUSED BY ESCAPE OF PUS FROM THE FALLOPIAN TUBE INTO THE ABDOMINAL CAVITY, FOLLOWING ON ABORTION ARTIFICIALLY INDUCED.

The Author cited the memoirs of Professor E. Martin, of Berlin, Howitz, Förster, and Vocke, in which were described cases of peritonitis caused by the escape of pus from the uterus and Fallopian tubes into the abdominal cavity. Peritonitis arising in this manner might be puerperal or non-puerperal. The condition of the uterus and tubes leading to this accident had been described under the names of salpingitis, salpingitis puerperalis, and metro-salpingitis. The prominent symptoms were: At a stage when involution of the uterus had made considerable progress, the enlarged tubes might be felt. When escape of pus takes place, sudden acute pain follows, then fever. The quick-ensuing tympanitis may obscure the signs of peritonitis. The case narrated by the Author was, it was believed, the first of the kind that had been recorded as having been observed in this country. The patient had been subjected to some operations, undertaken for the purpose of bringing on abortion. She was shortly afterwards delivered of twins, and died with symptoms of metritis and peritonitis. The post-mortem appearances were described by Mr. Oliver, House-Surgeon to the London Hospital. On the lips of the os uteri were three distinct punctures (the result of the manœuvres employed to procure abortion). The mucous membrane of the uterus was covered with pus and disintegrated blood. On slitting up the Fallopian tubes, little masses or pus could be seen at intervals, and in the left tube pus was distinctly traceable into the abdominal cavity. The Author, to whom the depositions taken in this case by the Coroner had been submitted, concluded that the pathological changes began in the uterine cavity upon the violent avulsion of the ovum; that inflammation was here set up by the decomposition of the placental remains and of blood; that the inflammation spread along the Fallopian tubes, resulting in the formation of pus, and escape of pus into the abdominal cavity; and that this was the cause of the peritonitis.

THE PATHOLOGICAL SOCIETY.

Tuesday, December 3.

Dr. Copland, President, in the Chair.

At a previous meeting, Dr. Wilks read a paper on

ACUTE ATROPHY OF THE LIVER.

The Author stated that this was one of the most remarkable diseases to which the human body is obnoxious, a form of jaundice of the most acute kind, attended by symptoms of blood-poisoning and derangement of the nervous system, in which the liver is found reduced to a very small size and to have undergone a most complete disintegration of its structure, so that sometimes on microscopic examination a single healthy cell cannot be discovered. It had been shown, also, of late by Frerichs, that a chemical decomposition takes place whereby some new proximate principles are formed, which are carried by the blood into various parts of the body, and especially to the kidney, whose office it would be to eliminate them. These crystalline bodies being discovered in the urine form an aid in the diagnosis of the disease. *Case* 1.—Elizabeth K., aged 17, was lately visited by Dr. Wilks, with Mr. Bisshopp, of South Lambeth, suffering from this dreadful form of disease. She had only been ill with jaundice for six days, and for the first four days no very urgent symptoms were present. She then had a fit, became unconscious, and remained so until Dr. Wilks saw her. She was in a state of coma, with stertorous breathing, foam on the lips, teeth clenched, tongue brown, pulse quick, and skin jaundiced—a combination of symptoms suggesting suppression of urine as well as hepatic disease. On percussion over the liver, only a very narrow band of dulness was discovered, indicative of the great shrinking of the organ. She was a married woman, and had some quarrels with her husband, so that a strong mental influence was discovered as predisposing to the complaint. She had also missed three menstrual periods. In the evening she miscarried, and on the following day she died. With great difficulty permission was granted to make an incision in the abdomen, so as to remove a portion of liver, a kidney, and the uterus. The latter showed that abortion had lately occurred. The liver was very much atrophied, and when examined by the microscope not a single healthy or entire cell could be discovered, nothing being observable, but disintegrated hepatic tissue, oil globules, and the crystalline bodies such as Frerichs describes under the names of leucine and tyrosine,—substances which hitherto had only been known as made artificially by the chemist. The kidney showed the tubules completely filled by disintegrated matters and the same form of crystals. The urine which had been drawn from the patient during life, presented casts of the tubules; and also when evaporated, these same substances in very large quantities—needle-shaped crystals of tyrosine and rounded masses of leucine; the latter were mostly found in the film which formed on the surface of the urine. *Case* 2.—Ellen L., aged 23, admitted, under Dr. Wilks' care, into Guy's Hospital on June 29, and died July 7. She had not been married long; but quarrelling with her husband had already occurred, and she was said to be a woman of dissolute habits. For the first five days, although extremely ill, she was thought to be suffering from simple jaundice; she then, however, was seized with severe vomiting, and fell into a typhoid state. Delirium came on, and she died. The post-mortem examination showed ecchymosis on various organs of the body. The liver was shrunken and lying against the diaphragm; it weighed only 1 lb. 3 oz. (This was exhibited to the Society.) Its section showed a peculiar red and yellow mottling always observed in these cases, and the microscope was unable to detect but very few cells which were not com-

pletely broken up. *Case* 3.—Elizabeth B., aged 30, admitted under Dr. Barlow, on July 12, and died on the 14th. She was a servant, had suffered from jaundice for three or four weeks, and when the severe symptoms appeared, she was brought to the Hospital. She was then in a dying state, and the nature of the case was evident. The body presented purpuric spots in various parts. The liver was shrunken so as to weigh only 1 lb. 9 oz.; it showed on the surface, as well as in the interior, a peculiar mixture of red and yellow colours. The tissue was quite disintegrated, so that few entire secreting cells were discoverable. The kidneys were large, and tubules gorged with dark, granular and biliary matter. The urine also contained tubular casts and masses of epithelium and pigment.

On reference to Frerichs work on the liver (the latest on the subject), we find that he mentions Alison and Bright as the authors who first described this disease. The former in the *Edinburgh Medical Journal* for 1835, the latter in the "Guy's Hospital Reports," for 1836. Bright's cases, however, occurred as early as the year 1832. He describes the liver in these cases very accurately—as small, soft, and flaccid to the touch, mottled with a dark red and yellow, and the acini in parts distinct. In styling them "inflammation of the substance of the liver" he was only anticipating the later theory of Frerichs.

Dr. Barlow asked for the etiology of the symptoms. Some, he said, believed that the bile acted like a poison, and that the cerebral symptoms sometimes attending jaundice were due to it. Since the observations of Frerichs it had been found that there was interference with the function of the kidneys, and, consequently, uræmic poisoning. The symptoms, however, attending this disease were not quite those of uræmic poisoning. In both there was often delirium, but in this affection the delirium was maniacal.

In reply to Dr. Gibb, Dr. Wilks said that the liver had not been examined for sugar.

Dr. Crisp said that it would in this case be interesting to ascertain if the blood, or any part of the body of these patients, was poisonous to the lower animals. He referred to a disease to which some of the lower animals were subject. If other animals ate parts of those so affected they also became diseased.

Mr. Wood exhibited a specimen of

HÆMORRHAGE INTO THE CAVITY OF THE ARACHNOID.

On November 3 the patient became paralysed on the right sight, except the face. The right pupil was dilated. There was profound insensibility. There was a clot found over the surface of the right hemisphere in the cavity of the arachnoid. At one point the dura mater was reddened, suggesting that ulceration had taken place. The interesting point in the case was, Mr. Wood said, that the paralysis was on the same side as the clot.

Mr. Barnard Holt exhibited

A STRICTURED URETHRA SHOWING THE RESULTS OF FORCIBLE DILATATION AFTER DEATH.

The patient, who was known to be suffering from severe stricture of the urethra, died in the Westminster Hospital of fever, and the opportunity was taken to introduce Mr. Holt's "stricture dilator," post-mortem, and to slit the stricture precisely as would be done in the living body, with the view of examining the effect produced by the operation. The urethra having been carefully removed and opened, showed a longitudinal rent in the mucous membrane and submucous tissue of the floor of the urethra corresponding to the situation of the two strictures which had existed, but the vascular tissue of the corpus spongiosum was uninjured. Mr. Holt remarked that the appearance corresponded exactly to those he had always imagined, but he had not had an opportunity of ascertaining, owing to the uniformly favourable result of the operation.

Mr. Henry Thompson said he had had the opportunity of closely examining the specimen, and of witnessing the performance of the operation in several cases certainly with the best results; but he still doubted whether the stricture was really torn, and thought that it was rather the healthy tissue which gave way.

Mr. Holt replied that as the calibre of the urethra was restored in all cases, he presumed that the stricture was split, and as Mr. Thompson himself said that the stricture was commonly at the lower part of the urethra, he considered it highly satisfactory that the rents should be found in that situation in the specimen.

In answer to Mr. Hutchinson, Mr. Holt said that his patients had never suffered from abscess in the perineum.

Mr. Nunn showed a specimen from a case of

ARTIFICIAL ANUS AFTER A HERNIA OPERATION.

The patient, a woman, had died of cancer of the rectum about six years after she had been operated on for hernia. As there was a history of a fæcal fistula having existed for some time after the operation, it became of interest at the autopsy to ascertain the state of the parts. The operation had been performed by Mr. Curling in the London Hospital. The fæcal fistula healed within a week or two, and the patient left the Hospital quite well within a month of her admission. The specimen showed a part of small intestine strongly adherent to the margins of the femoral ring, and somewhat puckered and contracted in calibre at the part. There was a free opening between the peritoneum and the sac at the upper part.

Mr. Curling stated that he could add but little to the history Mr. Nunn had given. He believed that the fæcal fistula had been a very small one, It had first formed several days after the operation.

Dr. Murchison showed a specimen of

HYDATID CYST OF THE LIVER FATAL BY RUPTURE INTO THE PLEURA.

The patient at the time of admission did not present any hepatic tumour. He died of acute pleurisy consequent on the rupture of an enormous cyst into the pleura sac. At the autopsy the cyst was found to have been developed in the liver and to have ulcerated through the diaphraghm. Vast numbers of cysts, varying in size from a pin's head to a large orange, were found in the pleural sac. Dr. Murchison remarked upon the desirability of early operative interference in these cases, and stated that the statistics brought together by Frerichs in his excellent work on Diseases of the Liver were strongly in its favour. Although cases of hepatic hydatids did sometimes get well spontaneously, yet such a termination was undoubtedly exceptional.

Mr. Christopher Heath exhibited a specimen of

COLLES' FRACTURE OF THE RADIUS WITH FRACTURE OF THE STYLOID PROCESS OF THE ULNA,

removed from a male subject, aged 55, in the dissecting room of the Westminster Hospital. The radius was a well-marked example of the accident, which must have occurred many years before death as the surfaces of the bone were thoroughly smoothed off at the point of fracture. The styloid process of the ulna had been broken off at its base and was attached by fibrous tissue. Mr. Heath believed the latter injury to be very uncommon, no notice being taken of it by some standard authors.

Dr. Broadbent brought forward specimens of

DISEASED SUPRA-RENAL CAPSULES WITH DARKENING OF THE SKIN.

The patient, a girl, who had suffered for some months from debility, had been admitted into St. Mary's Hospital suffering from a form of low fever. After this she had chorea, and partially lost the use of the left arm and leg. Sensation remained perfect in these extremities. It was noted that her skin, especially that of her face and arms, was dark, as if sunburnt. She had, however, followed an in-door occupation, and had not been exposed to the sun. At length she sank. At the autopsy both supra-renal capsules were found totally disorganised by scrofulous deposit. There was also a small tumour of doubtful nature growing from the lumbar portion of the spinal cord.

Dr. Broadbent next showed a specimen of

ANEURISM OF THE ARCH OF THE AORTA.

The case was chiefly of interest in reference to the treatment of these cases by bleeding. The patient, a man of middle age, had been for eighteen months under the care of Dr. Sibson, at St. Mary's Hospital, with unmistakeable symptoms of a large thoracic aneurism. On six different occasions he was bled from the arm to quantities varying from four to six

ounces. On all occasions great relief was afforded by the depletion. The case was not one in which Valsalva's method was tried; for, instead of starvation, the man was liberally fed and the bleedings were small and wide apart. After death the arch of the aorta was found most extensively diseased, and dilated into a large aneurismal sac.

Dr. Sibson wished particularly to insist that the treatment adopted was not Valsalva's. The bleedings had only been resorted to when the distension of the sac had become intolerable, and the man had throughout been supported by a nutritious diet. Abstinence from all fluids had been insisted on as much as possible. Dr. Sibson felt no doubt that the man's life had been prolonged and his comfort greatly increased by the timely resort to depletion. The benefit on each occasion had been most marked. It was an interesting point that there was, in addition to the aneurism, regurgitant disease of the aortic semi-lunar valves. Probably by the incompetency of these valves, the impulse of the blood within the aneurismal sac had been somewhat broken.

Dr. Crisp said that the case proved, at any rate, that we might bleed in cases of aneurism and diseased heart without killing our patients. He could not doubt that before long the lancet would again partially regain its former popularity, as he thought the present fashion went into an extreme.

Dr. Peacock said that it would be in the recollection of some of the Members of the Society that at a former meeting he had expressed an opinion unfavourable to the employment of Valsalva's method in the treatment of internal aneurisms, and he could not regard the case just related as opposed to the views he then expressed. Indeed both Dr. Broadbent and Dr. Sibson spoke of the bleedings practised as only had recourse to for the relief of urgent symptoms; and the general system pursued was not that recommended by Valsalva. He also did not regard the case as proving the desirableness of having recourse to bleeding in cases of incompetency of the aortic valves; on the contrary, his opinion was very decided that in the treatment of cases of regurgitant disease the employment of depressing measures was, as a general rule, injurious, and that benefit was very generally derived from the opposite course. That form of valvular disease, in this as in other respects, contrasting strongly with cases of regurgitation through the mitral orifice.

The President said that he fully agreed with Dr. Peacock's opinion, but something must be allowed for the state of the patient's general health.

Dr. Murchison showed a specimen of

ANEURISM OF THE MIDDLE CEREBRAL ARTERY.

The patient, a middle-aged and intemperate man, had died with symptoms of apoplexy which had come on suddenly during a debauch. An aneurism the size of the kernel of a nut was found involving the trunk of the right middle cerebral artery. It had given way, and a clot of blood had been poured out into the fissure of Sylvius. It was worthy of note that the man had previously suffered from epilepsy.

Mr. Barwell showed a cast of

THE TEETH FROM A SYPHILITIC CHILD.

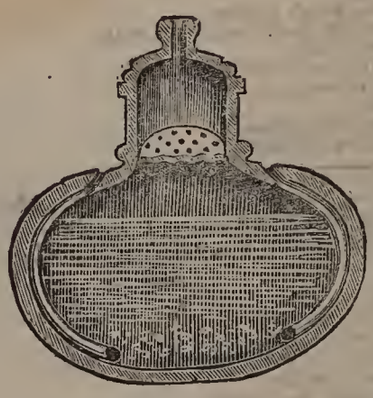
He stated that at the time he had the cast taken, he believed the case to be exceptional to Mr. Hutchinson's views, and that the child was not the subject of hereditary taint. Subsequently, however, he had ascertained that such was not the case, inasmuch as the father had suffered from the disease. The child was now about thirteen.

Dr. Murchison remarked that as Mr. Hutchinson was present, he should like to ask him whether he had not often met with these malformed teeth in patients not the subjects of hereditary syphilis.

Mr. Hutchinson replied that he did not believe one-tenth of the cases of malformation of the teeth, which came under notice, had anything whatever to do with syphilis. The malformation which was diagnostic of that disease was a special, very peculiar, and comparatively rare one. It consisted of dwarfing and notching of the central upper incisors of the permanent set. If this condition of this pair of teeth were not present, all other deformities should count for nothing. He had met with no single case tending to shake his confidence in the value of this condition as a reliable symptom. On the contrary, all recent observations had tended to confirm it. It was, however, a condition which varied in degree, and which required some practice in its appreciation. In many cases of hereditary syphilis the teeth were but little malformed, and in some they might even escape altogether. He believed that the malformation was due to inflammation of the dental structures at an early period of infantile life. If a syphilitic infant escaped an attack of stomatitis, the teeth would probably escape malformation, just as if, should no inflammation of the nasal passages occur, the nose would escape the deformity which is usually so marked in these children. He had had many opportunities for seeing families of syphilitic children, and had always found the malformation of teeth most marked in the eldest, and becoming gradually less so in the younger members. He would venture to add, as a precaution, that these peculiarities were never met with in the first set of teeth, since many mistakes had come to his knowledge in consequence of inattention to this fact.

NEW INSTRUMENT.

CURTIS'S INHALER.



The accompanying woodcuts represent this useful new Inhaler. "Simplicity of arrangement, cleanliness, strength, portability, extended surface for evaporation, free ingress of air, which must pass through the material of inhalation, and equally free egress; a separate chamber for such materials of inhalation as may require it, and which do not come in contact with water, such as creosote, chloroform, ether," etc., are the objects attained by this instrument. It is mounted with an elastic tube, and provided with two mouth-pieces, Nos. 1 and 2.

When required for use, the plug is removed, the perforated plate taken out, and hops, hemlock, digitalis, or other medicinal herbs are placed in the vessel. The perforated plate is replaced and two-thirds of the vessel filled with boiling water, the mounting adjusted, and it is then ready for use. To inhale volatile vapours, a small piece of sponge should be placed on the perforated plate in the upper chamber, with hot water, below or not, as recommended by the prescriber.

This Inhaler is made by Messrs. Curtis, of Baker-street, and is very favourably spoken of by many Medical men who have used it.

Inscriptions of Students at the Paris Faculty of Medicine.—The total number of Inscriptions for 1861-2 amounts to 1131, of which 369 are new. For 1860-1 there were 1196 inscriptions, 293 being new ones. From 1850 to 1856 the number of new inscriptions underwent a rapid diminution, while for 1856 to 1861 it has undergone a more gradual but progressive increase.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following are lists of candidates who passed the respective Examinations indicated :—

CHEMISTRY.

Hicks, John Wale (prize), St. Thomas's Hospital

ANIMAL PHYSIOLOGY.

Hicks, John Wale (prize), St. Thomas's Hospital
Rooke, Thomas George, Regent's-park
Winterbotham, Edward Weedon, University
Equal { Holborn, Alfred New / Smith, Henry Lakin, University

VEGETABLE PHYSIOLOGY AND STRUCTURAL BOTANY.

Hicks, John Wale, St. Thomas's Hospital.

SECOND M.B. EXAMINATION.—1861.

EXAMINATION FOR HONOURS.

PHYSIOLOGY AND COMPARATIVE ANATOMY.

Fagge, C. H. (Scholar and Gold Medal), Guy's Hospital
Dickins, F. V. (Gold Medal), Manchester Royal Infirmary
Galton, John Henry, Guy's Hospital
Bankart, James, Guy's Hospital
Buszard, Frank, Guy's Hospital

SURGERY.

Bankart, J. (Scholar and Gold Medal) Guy's Hospital
Fagge, C. H. (Gold Medal), Guy's Hospital
Buszard, Frank, Guy's Hospital

MEDICINE.

Equal { Fagge, C. Hilton / Gee, S. Jones } Scholarship and Gold Medals { Guy's Hospital / University College
Bankart, James, Guy's Hospital
Mackenzie, Morell, London Hospital
Galton, John Henry, Guy's Hospital
Equal { Buszard, Frank, Guy's Hospital / Dickins, Frederick Victor, Manchester Royal Infirmary

MIDWIFERY.

Galton, John Henry (Gold Medal), Guy's Hospital
Fagge, Charles Hilton, Guy's Hospital
Bankart, James, Guy's Hospital
Mackenzie, Morell, London Hospital
Buszard, Frank, Guy's Hospital.

M.D. EXAMINATION.—1861.

Adams, Samuel Hoppus, University College
Braithwaite, James, Leeds School of Medicine
Cayley, William, King's College
Cribb, Arthur John, Middlesex Hospital
Davis, Theodore, St. Bartholomew's Hospital
Easton, John, King's College
Gervis, Henry, St. Thomas's Hospital
Harley, John, King's College
King, H. S. T., B.A. Camb., King's College
Sadler, M. T., B.A. London, St. Bartholomew's Hospital
Simpson, Henry, University College
Smith, Henry Montague Duncan, University College
Walker, Thomas James, University of Edinburgh
Way, John, King's College
Weaver, Frederick Poynton, Guy's Hospital
Winslow, Henry Forbes, King's College.

APOTHECARIES' HALL. — Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, December 5 :—

Catt, Charles Verrall, Brighton
Dobson, Thomas, Fleetwood, Lancashire
Griffith, George, Pointy Castle, Pembrokeshire
Jones, William Owen, Bryntegid, near Bala, North Wales
Lamb, Joseph, Birkenhead, Cheshire
Leeds, Thomas, Stratford, near Manchester
Murray, Henry Ash, Westminster Hospital
Wild, John E.

The following gentlemen also on the same day passed their First Examination :—

Ballard, William W., Tunbridge, Kent
Carter, Jabez, Bedford
Rhodes, Charles, St. Mary's Hospital.

As an Assistant—

Pain, Tertius D'Oyly, New Peckham.

APPOINTMENTS.

EVERETT.—Benjamin George Everett, M.R.C.S. and L.S.A., has been elected Medical Officer and Public Vaccinator to District No. 4, and Workhouse of the Chailey Union, Sussex.

HULME.—Edward Charles Hulme, of Gower-street, F.R.C.S. Eng. (exam.), L.S.A. Lond., has been appointed one of the Surgeons of the Great Northern Hospital, King's-cross.

RINGER.—Sydney Ringer, M.R.C.S. Eng., L.S.A. Lond., has been appointed Resident Medical Officer of University College Hospital, London.

RUSH.—William Arthur Rush, M.R.C.S. Eng., L.S.A. Lond., has been permanently appointed Medical Officer for the Southminster District, in the Maldon Union, Essex.

YOUNG.—A. Young, Assistant-Surgeon in the Bengal Medical Service, has been appointed an Assistant Commissioner of the First Class, in the Province of Oude.

DEATHS.

BAKER.—December 1, William Augustus Baker, of Blackpool, Lancashire, M.R.C.S. Eng., L.S.A. Lond., aged 57.

HESLOP.—December 2, Luke Coates Heslop of Haverfordwest, Pembrokeshire, F.R.C.S. Eng. (exam.), L.S.A. Lond., aged 45.

NOBLE.—December 7, William Noble, of Thame, Oxfordshire, M.R.C.S. Eng., and L.M., aged 76.

YOUNG.—November 24, at Deal, Kent, George Edward Young, late of Boston, Lincolnshire, L.R.C.S. and L.M. Edin., L.S.A. Lond., late Assistant-Surgeon R.N., aged 31.

SANITARY STATE OF THE FEDERAL CAMP. — A letter, dated November 20, thus describes the state of the troops at Hilton's Head :—"Congestive fevers, which carry off the patient in from ten to fifteen hours, are becoming painfully prevalent, especially with the Maine 9th. The Surgeons say the disease has been brought from the camp on the eastern shore of the Potomac. But it would seem that a long confinement on shipboard, followed by hard work in transporting merchandise through the surf, from boats to the shore, will sufficiently account for an extraordinary mortality, without recurring so far to the past. The ground upon which Fort Walker and the encampments are located is sufficiently high—being a plateau terminating in a bluff, rising ten or fifteen feet above the beach. But there is much low land, such as might be profitably used for rice fields, bordering upon the creeks, and therefrom a miasma issues, which makes it quite impossible to reckon Hilton's Head a healthy camping ground."

THE BUST OF COGAN THE MURDERER.—An assassin, Cogan by name, has recently been executed at Newgate. The cranium of this wretched being, which was worth less than nothing while he lived, has become a precious object the moment he has ceased to exist. A deputation of gentlemen under a phrenological or commercial pretext, no matter which, repaired to Newgate to get possession of it. The Surgeon of the prison opposed its sale, on the ground that the cranium of this criminal exhibited nothing remarkable. This act of authority has met with its approvers, but nevertheless it has also been blamed, as is the common lot of things, "We cannot please every one and his father." Those who approve the Surgeon's decision applaud him for having refused to furnish new aliment to the morbid appetite of the London idlers, stimulating their greedy curiosity. But the craniographists and even the phrenologists mourn over the lost opportunity of a *tete-à-tete* with a great criminal. By help of his bumps they would have obtained more particulars concerning him than the judges who have condemned him. Now Cogan must perish altogether. Such is the determination of the Newgate Surgeon. To you and me, dear reader, that is a matter of pure indifference.—*Gazette Médicale.*

DEATH FROM CHLOROFORM.—On Wednesday an inquiry was instituted before Mr. G. S. Brent, the Deputy Coroner for West Middlesex, touching the death of Mr. Charles Ellwood Ashton, aged 19, a Medical student acting as dispenser at the Notting-hill Dispensary. The porter to the Institution said the deceased had been dispenser from May, 1860. He was cheerful and in excellent spirits last Saturday, and there was no reason to expect his death. He told witness that he took chloroform, as he liked the sensation. After dinner he went upstairs into his bedroom and locked the door, as was his custom. Witness went out, and on his return, about half-past five, he called him, but received no answer to his loud knocking at the door. Witness then ran to the Dispensary for the chloroform bottle, and found it missing. His wife and himself then went up to the door, and, again receiving no reply, they sent for Mr. Cole, a neighbour, and Dr. Jackson. The door was broken open, when the deceased was found lying on the bed, dressed, with a cap and pocket-handkerchief over his face. The handkerchief was inside the cap, and appeared to be saturated with chloroform. He never threatened to commit suicide, and always appeared cheerful. He said he should go to sea if he did not pass his examination. Robert Jackson, M.D., and Medical Superintendent to the Dispensary, deposed that, when he saw the deceased after the fatal accident, he had a cap and handkerchief fastened tightly over his face, the elastic band of the cap being over his head. There was a bottle of chloroform, from which he should imagine four drachms of chloroform had been taken, —perhaps scarcely so much. The limbs were cold and rigid. The post mortem examination revealed extreme rigidity.

There was no disease to account for death. He knew the deceased was in the habit of taking chloroform. Several witnesses were then examined with the view of ascertaining if suicide was intended. It appeared that the deceased had £30 per annum from the Institution, received small remittances from his uncle, and was not known to have been short of the necessaries of life. The jury unanimously found that "Death was produced by an overdose of chloroform, but whether suicidally intended or otherwise there was not sufficient evidence to prove."

Death by Prussic Acid.—A coroner's inquest was held this week at Kentish-town by Mr. G. S. Brent, Deputy Coroner for West Middlesex, on the body of Mr. Francis Robert Smith Upjohn, aged 49, residing as Assistant-Surgeon with Dr. David Winstone, at 8, Wellington-road, Kentish-town. Miss Upjohn, daughter of the deceased, stated that, although her father resided with Dr. Winstone, her mother and the other members of the family lived at 99, Carlton-road. She last spoke to her father on Saturday last. She declined to say what then took place. On Wednesday her little brother delivered a note from her mother to her father. On Friday the family were apprised of his death. Dr. Winstone stated that the deceased, when he came to him, three months ago, was of regular habits. He had since been in the practice of taking laudanum in small quantities, and in consequence was often in a stupid state, as if inebriated. On Thursday, about midnight, the witness returned from the country, where he had been since the preceding Sunday. The deceased was then well. On Friday morning, shortly after nine, the housemaid rushed into the sitting-room, exclaiming "Dr. Upjohn is dead." The witness immediately went up to the room, and found the deceased dead in bed. A bottle of prussic acid lay on the floor, and there could be no doubt that his death was caused by that poison. It was probable that the deceased had taken the prussic acid bottle by mistake for that from which he was in the habit of taking laudanum, as both bottles were of the same size, and might have been standing together on the surgery table. The jury returned an open verdict, to the effect that the deceased died from the effects of prussic acid.

Testimonial to Sir John Fisher.—On the 4th inst. a deputation of the Divisional Surgeons of the Metropolitan Police waited on Sir John Fisher, their chief, at his residence, 5, Grosvenor-gate, Park-lane, to present him with a handsome silver inkstand of the value of forty guineas, subscribed for by them and others, with the following address:—"To Sir John W. Fisher, Surgeon-in-Chief to the Metropolitan Police,—We, whose names are attached, being Divisional Surgeons of the Metropolitan Police, beg leave to tender our very sincere thanks for the solicitude and kind interest you have at all times evinced for our Professional dignity and welfare, for the urbanity and good feeling you have ever exhibited when personally applied to, and your general courteous and gentlemanly bearing. As a slight acknowledgment thereof, we request your acceptance of a silver inkstand. We have to regret its insignificance, but feel confident you will equally appreciate the motive, as though its intrinsic value were far more worthy of consideration. We also take the opportunity of congratulating you upon the high honour and distinction conferred upon you by her Most Gracious Majesty, and sincerely trust you may be long spared and have health to enjoy a mark of favour so richly deserved."

Sale of Mr. Quekett's Effects. — The highly-interesting collection made by Mr. Quekett has been on sale during the week at the rooms of Mr. Bullock, High Holborn. The valuable library having been disposed of on Tuesday, the auctioneer proceeded to sell on Wednesday the microscopes, telescopes, and general scientific instruments. The first lot was an expensive instrument, made by command of George III. for one of the Royal Dukes, by the celebrated Benjamin Martin; this instrument, which must have cost a large sum, and which the deceased very much prized, sold for only £15 15s. to the Microscopic Society, who also became the purchasers of several microscopes and microscopic objects. A microscope by Ross fetched £25. Herschell's own astronomical reflector telescope, by the aid of which most of his discoveries were made, and described as a 7ft. 6 in. Newtonian, sold only for £11. A fine 5-foot astronomical telescope, with horizontal and vertical motion, fetched £16 16s. Benjamin Franklin's own loadstone, encased in ornamental brass, with the inscription, "Benjamin Franklin, Boston, N.E., 1779," was knocked down to Mr. Belfour, of the Temple, for only one guinea. An interesting and very elaborate piece of glass-work, to show the circulation of the blood, fetched only half-a-guinea. The sale of ancient arms and armour proceeded on Thursday.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 7, 1861.

BIRTHS.

Births of Boys, 837; Girls, 819; Total, 1656.
Average of 10 corresponding weeks, 1851-60, 1660·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	666	634	1300
Average of the ten years 1851-60	632·8	635 6	1268·4
Average corrected to increased population..	..	..	1395
Deaths of people above 90	..	..	..
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	5	10	2	10	2	4
North ..	618,201	1	5	14	2	9	9	5
Central ..	378,058	..	2	15	2	8	6	2
East	571,129	1	3	6	1	14	11	4
South ..	773,160	1	2	24	1	9	9	1
Total.. ..	2,803,921	3	17	70	7	50	37	16

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Lectures on Anæmia and Bloodletting, by Dr. Chambers; on Diabetes, by Dr. Richardson; and a Clinical Lecture, by Mr. Le Gros Clark, are ready for the press, and will shortly appear. Mr. W. Adams's Course on Spinal Curvature will be concluded in the present Volume.

Medicus.—The ethical question raised by the enquiry at the College of Physicians this week is so important, that, rather than give an imperfect account of the proceedings, we prefer deferring the report of what took place, and our own comments upon it until next week.

Anxious had better consult some elementary work on Anatomy.

Dr. Bainbridge's case of Poisoning by Iodine shall appear next week if possible.

Inquisitor.—It is quite time that something was done to protect the poor from the mistakes of ignorant midwives—but the Medical Council are not at all likely to move in the matter.

Werdna.—"An M.D. Cantab, and M.R.C.S. Eng., one of the *Physicians* to a County Infirmary, now offers himself as a Candidate for the *Surgeoncy* to an Eye and Ear Dispensary to the great disgust of his brother Physicians. Are his proceedings in accordance with Medical etiquette." His proceeding is certainly unusual, and we should think that he makes a great mistake; but if he violates no rule of the Infirmary, and breaks no compact with his colleagues, we do not see that, having a Surgical diploma, he may not accept a Surgical appointment. As a question of policy we should think it would be an egregious blunder on his part.

Colney Hatch.

The letter of *One of the late Candidates* is far too personal for insertion in our columns.

Podophyllin.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I was sent for the other night to see a fat, large-headed boy of three, just recovering from a sudden attack of convulsions. I prescribed one grain of podophyllin. In four hours it produced vomiting of bile and undigested food (including some white of egg, which I was assured had been taken four days previously), and a copious black motion. These effects were followed by nine other motions, black, green, and yellow, in the course of the night, with scarcely any pain, no more sickness, and no straining. No medicine could have acted more satisfactorily. I ascertained that it was a resinous podophyllin, prepared by Hudson, of the Haymarket.

I am, &c.

December 18. R. Druitt.

Dr. Smith, of Burton-crescent.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Could any of your readers inform me whether the person who advertises as Dr. Smith, residing at No. 8, Burton-crescent, W.C., is legally qualified to such a title: or whether he has qualification to enable him to practise at all. I cannot find his uame in the Medical Register.

I am, &c. Justitia.

The Electric Cautery.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Many inquiries having been made of me for the name of a maker of the apparatus for electric cauterisation, shown by me at the Obstetrical Society's last meeting, may I beg permission to repeat that it was made at home; but that that I have lent it to Mr. Matthews, of Portugal-street, who has undertaken its manufacture commercially.

At the same time, I would take occasiou to remark that my desire to give our Profession a simple, powerful, and economical instrument, runs the risk of being abortive, unless the Surgeon will himself obviate it by copying my battery at home. No instrument could be more easily made by any one possessed of a very little knowledge of tools and of the soldering of metals.

As a full description of the instrument will probably be published in the next volume of the "Obstetrical Society's Transactions," togethor with engravings of the different parts of the apparatus, it will not be difficult for Medical men residing in the country to possess themselves of this arrangement—tbe material being ready to hand in almost any country town.

A single cell is all that is required for ordinary purposes, but two cells constitute an extremely powerful combination for the cauterisation of larger surfaces. I am, &c.

Sloane-street, December. Robert Ellis.

Consciousness a Safeguard.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Your Correspondent "J. J. C." in the last Number of your Journal, says he wishes to know why Dr. Lee states that "consciousness is a safeguard in all the operations of Midwifery." I have often heard Dr. Lee make thatremark, and it would strike me that the reason is very plain. In operating in Midwifery we may say that we are working in the dark, trusting to our sense of touch instead of that of sight. Surely, then, the consciousness of our patient is of great value to tell us if we are implicating a portion of the os between the blades of our forceps, or if we are injuring the same with our perforator. Perhaps your correspondent will take this as an explanation if his letter should escape the eye of Dr. Lee. I am, &c. Crotchet.

November 26.

Curtis' Ergot.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reply to Dr. Monckton's very proper remarks in the Number of the *Medical Times and Gazette* dated September 23, alluding to our advertisement, we beg to inform you that our labels and bills have been, from the commencement of our making the preparation, printed "Liquor Secalis Cornuti" and, moreover, the preparation was advertised for a considerable period in the same manner. We are quite at a loss to account for the alteratiou, unless at the commencement of the year we discontinued the advertisement, and afterwards renewing it, the error (if any) fell from the hands of the priuter. It may be as well to remark tbat there exists a difference of opinion as to which is really correct "Liquor Secali" or "Liq. Secalis," many of our customers contend Secali to be right, and this is very readily accounted for, when we find authors differ as to tbe genitive of Secale. We are, &c.

Curtis and Co.

Head Dress for Volunteer Surgeons.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can you or any of your numerous readers, favour me with the information as to what is the correct head dress, &c., for Surgeons in the Volunteers? The impression I have bad given me is that the Surgeons in the Staff of a Battalion, wear the cocked hat and Medical Staff cross belt, as in the Line and Militia, while the Hon Assist. Surgeons wear the head dress of their respective Corps, and the Medical Staff cross belt. I do not know if there is any order on the subject, but it will oblige many, if you are the means of setting this query at rest.

I am, &c.,

December 9. A Volunteer Surgeon.

[Perhaps some one "in authority" will reply to this.—Ed.]

Abdominal Tumour.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Mrs. G. was admitted into the Coleraine Infirmary on the 26th of March, 1861. On examination, I found a tumour more than half the size of a child's head in the region of the left ovary. The tumour was very distinct and well marked. It was tender to the touch on deep pressure; but it was not attached to the abdominal muscles, nor was there any discoloration of the skin. She said, so far as she could judge, it was there previous to her last confinement on the 26th of the preceding month. Her confinement was easy, and her recovery good. I was at a loss to know the exact nature of the tumour. There was too much tenderness to pressure, and too much feverish action in the constitution, to permit me to look upon it as a simple ovarian tumour. I could uot reach it with the finger, by a vaginal examination; there was no fulness in the pelvis, nor yet any tenderness in its walls; and the uterus was perfectly natural, except that it measured three and a half inches by Simpson's sound, and consequently had not quite returned to its natural size since tbe woman's confinement. The milk was so abundant that I did not find it necessary to remove the child from the breast. The child got on very well, and is still very healthy. I used every plan of treatment which I thought advisable, but without the slightest effect, beyond the mere matter of supporting the woman's constitution, a thing which I never lost sight of. The tumour slowly, but slightly, increased in size; and the tenderness increased so far that the legs were constantly drawn up in bed to relieve the muscular pressure. On paying my visit one morning in the last week of May, the nurse told me that the the poor woman was dying from a sudden attack of diarrhœa, and that the discbarge was so offensive they could hardly live in the place. I said I was glad to hear it, as she would soon be all right, the tumour had burst into the bowel. I inspected the stools, which were indeed numerous, and found them composed of the ordinary matter, about the consistence of gruel, mixed with a large quantity of very dirty pus. The discharge came exclusively from the bowel: and the tumour was gone. The patient was instantaneously relieved, made a rapid recovery, and was discharged on the 10th June. I saw and examined her three days since, and there is not the slightest trace of the tumour, nor bas she suffered in any way from what she came through.

I am, &c.,

Coleraine, Ireland, October 28. James C. L. Carson, M.D.

Turkish Baths.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In justice to the Southport Physician whose name is mentioned in the circular I have issued, and to which you make reference in last Saturday's *Medical Times and Gazette*, I beg to offer the following explanations.

1st. The circular bears my own signature, and if the phraseology I have employed has compromised or placed the gentleman in a false position with his Medical brethren, I much regret tbe circumstance, and must take on myself the sole responsibility.

2nd. The connection of the Physician's name with my bath was not of his seeking, but was in compliance with my own earnest solicitation. Many invalids, especially among the poorer classes, having sought my advice as to the use of the bath, and some of these being cases of difficulty and doubt, I have felt tbat it would be safer and more satisfactory both for myself and the public, if I had a Medical man to take the responsibility in such cases. The chief difficulty has been to make a selection without appearing invidious or giving offence, especially as I state in my circular that nearly every Medical man in the town has recommended the bath in health and disease. I felt it my duty, both for my own safety, and in order to obtain the confidence of invalids, to secure the services of a gentleman who had an established reputation in the Profession, on the one hand, and whose knowledge and experience of the operation of the Turkish Bath on the other, would qualify him to give advice in the case of difficulty and doubt which might be referred to him. Both those desiderata, I know, were possessed by the Physician alluded to. He presided at the first lecture delivered on the subject in Southport, a copy of which I forward to you.

Having expressed to the gentleman my earnest desiro that he would relieve me of the responsibility by allowing me to refer to him for advice in cases of doubt, he at length consented, but he distinctly stipulated that I should not use his name in my newspaper advertisements. The chief object in making this arrangement has been to meet the requirement of poor invalids whose circumstances prevented them from paying for Medical advice as to the use of the bath. Invalids who have the means will generally consult their own Medical adviser. The value of the Turkish Bath as an aid to Medicine, and other remedial agencies, is admitted by Medical men generally, and I cannot discover anything derogatory to the profession in a Physician making arrangements to become the Medical adviser in connection with such an institution. I am, &c.,

Southport, December 9. William Haigh.

COMMUNICATIONS have been received from:—

Dr. Conolly; Dr. Chambers; Dr. Richardson; Mr. Armstrong Todd; Dr. Thorowgood; Dr. Druitt; Dr. O'Connor; Mr. Gaut; Mr. W. Adams; Dr. Sauveur; Registrar-General; Mr. Haigh; Mr. Everett; Mr. Miles; Mr. T. S. Marsden; Registrar-General, Edinburgh; Dr. Maunsell; Mr. Harding; Mr. Brooking; Mr. W. Hewitt and Secretary of Pharmaceutical Society.

APPOINTMENTS FOR THE WEEK.

December 14. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

16. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

Medical Society of London 8½ p.m. Mr. Maunder, "On Primary Venereal Ulcers; possible sources of error of diagnosis, and the evil consequences of such error."

17. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Pathological Society, 8 p.m. Council Meeting.

Ethnological Society, 8 p.m. A Paper will be read on the "Osteology and Dentition of the Andaman Islanders," by Professor Owen.

18. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Society of Arts, 8 p.m. Meeting.

19. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

20. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Western Medical and Surgical Society of London, 8 p.m. A Practica Evening for the Narration of Cases and the Exhibition of Specimens.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday next:—

By Mr. Fergusson—Lithotrity; Cleft Palate.

Messrs. Savory and Moore beg to

invite the attention of the Medical Profession to two SOLUBLE EFFERVESCING COMPOUNDS of QUININE which they have just succeeded in producing in the elegant and convenient form of Granular Powders, viz.—

GRANULATED EFFERVESCING CITRATE of QUININE.

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Dissolved in water or wine these Salts make a perfectly clear sparkling solution, which, in the state of effervescence, is more palatable than ordinary quiniue or iron solutions. Both preparations will remain permanent even in the hottest climates.

The following REMEDIES and AUXILIARIES in MEDICINE and SURGERY, also introduced by Savory and Moore, are generally approved by the Profession:—

THE HYPOPHOSPHITE of QUININE, of IRON, and of QUININE and IRON, in scales.

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"Its combination appears to me to be perfect, and it is a good substitute or the natural carbonated chalybeate."—Professor Letheby.

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DATURA TATULA for ASTHMA, prepared in the most convenient forms for general use,

THE EYE DOUCHE, or FOUNTAIN, for applying cold water or Lotions to the Eyes.

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"We have tried one of these Douches, and can express our approval of it."—Medical Times and Gazette.

THE EAR DOUCHE: an efficient substitute for ordinary Syringes.

"They are most useful instruments."—Medical Times and Gazette

"We are much pleased with the ingenuity of this admirable contrivance."—The Chemist and Druggist.

N.B.—Imitations of the above Eye Douche being defective in several essential particulars, instead of producing the beneficial effects, cause irritation and congestion, rendering it important to observe that the words "Savory and Moore, London," are conspicuous on every genuine Douche.

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SYR. CALCIS PHOSPHATIS.

And all other Syrups of the Pyrophosphates, Biphosphates, &c. &c.

LIQUOR SUMBULI.
TINCT. ACTEÆ RACEMOSÆ.
MAGNESIÆ CITRATIS (Effervescing).
CADMII IODID.
CERII OXALAT.

Also their

LIQUOR SECALI CORNUTI.
(Recognised Preparation.)

Exhibited at the "Obstetrical Society of London," by the President, June 1st, 1859 (vide the "Lancet," June 11th, 1859).

"University College Hospital, Oct 28th, 1858.

"I have much pleasure in stating, that after numerous trials under Dr. Murphy's direction, I have found the Liquor Secalis, as prepared by Mr. Curtis, to *far exceed* all other preparations of the kind.—HENRY HEMSTED, M.R.C.S.

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Messrs. Rew and Co. solicit the

attention of the Profession to the following approved Preparations:—

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HORSE CHESTNUT POMADE, a most effective application for Hæmorrhoides.

LIQUOR CASTANEA EQUINA.—Two or three doses will often arrest the most acute paroxysms of Gout, and is of great service in Chronic Rheumatism.

LIQUOR ACTEA RACEMOSA (Baneberry), in doses of forty to sixty drops, for Acute and Chronic Rheumatism.

CARBONATE of LITHIA, and OXALATE of CERIUM, at prices according to quantity.

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REW and CO.'S LITHIA WATERS consist of four kinds, viz.—Lithia, Iodide of Lithia, Lithia with Potash, Lithia with Ammonia. These are guaranteed to contain a proper proportion of Lithia, and are in every way very superior to the ordinary Lithia Waters of commerce.

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profession of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Physician to the Hardwicke Fever Hospital, Dublin, and Physician-General to His late Majesty's Forces in Ireland, &c. &c., contained in the "*Dublin Hospital Reports*," *vol.* 1, *p.* 317.

"Since this case came into my possession, I have been led to "make a good many clinical experiments, which have enabled me "to verify the reports which I had heard of the efficacy of JAMES'S "POWDER, in sometimes removing the APOPLECTIC DIATHESIS in "persons advanced in life. It is, moreover, worthy of observation, "that JAMES'S POWDER has been of remarkable utility in "certain instances of DETERMINATION OF BLOOD TO THE HEAD, which "occurred at an early period of life, and threatened to end by "effusion. Lastly, in two cases of GENERAL PLETHORA, in which, "however, the head was more affected than any other part, "JAMES'S POWDER was exhibited by me with perfect success."

Also *vol.* 1, *p.* 320.

"The following very simple method of exhibiting JAMES'S "POWDER, in cases of undue determination of blood to the "head, is that which I have generally pursued. The patient is "made to begin with a very moderate dose, not more than two "grains at bedtime, and to increase the dose by half-a-grain every "night, until some sensible effect is produced upon the stomach, "bowels, or skin. Should the stomach be affected with sickness, "the dose must be lessened by one grain on the following night. "By the addition of a little rhubarb to it, a larger quantity of "JAMES'S POWDER may be administered than the stomach could "otherwise bear. If the skin is softened, or the bowels affected, "the dose should not further be increased, but it must be repeated "every night for a considerable length of time: in several instances "I have known eighteen or twenty grains taken for a considerable "period without any inconvenience."

The following extract (showing the increasing estimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumlæan Lectures," 1858-59, delivered before the Royal College of Physicians, by A. Tweedie, M.D., Physician to the London Fever Hospital, who is admittedly one of the highest practical authorities on the subject of Fever. He says, ("*The Lancet*," *June* 16, 1860, p. 590,) as follows:—

"If the febrile excitement be such as to require antimonial prepa- "rations, a pill containing 2 or 3 grains of James's Powder (prepared by "Newbery) should be taken at intervals according to circumstances."

In writing to Messrs. Newbery, he says:—

"I wish that your preparation was always used."

To secure the dispensing of the *original* preparation, which, for 114 years, has been sold by the house of Newbery and Sons, in St. Paul's Churchyard, it is necessary to prescribe it as "PULVIS JACOBI VER., NEWBERY'S," otherwise another article (wanting in the best properties, and recommended to be given in a different code of dose, *though called by the same name*) may be substituted for the original medicine.

This substitution must bring disappointment, and of course deter Practitioners from prescribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

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Usual Discount to the Profession.

ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT

The Grosvenor Place School of Medicine,

DURING THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.,

Surgeon to the Royal Orthopædic and the Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital, &c.

Lecture V.
CLASSIFICATION OF CASES OF LATERAL CURVATURE OF THE SPINE.

Gentlemen,—In all books on lateral curvature of the spine you will find the cases arranged according to the different stages, or degrees of curvature, through which the several authors assume this affection to pass. Thus we find the external appearances and symptoms described of the first, second, and third degree of curvature, etc., it being, of course, assumed that a definite order of changes always occurs, and that the cases are essentially of the same nature. Even in books written by Orthopædic authorities on lateral curvature, who admit the existence of several forms of this affection, these are merely mentioned, and we find one form only described, viz., that which occurs in growing girls, and supposed to depend upon muscular and ligamentous debility associated with mechanical causes, such as standing on one leg, etc. This may be called the popular form of lateral curvature, but, unfortunately, it appears to be generally assumed to be the typical form of this affection, and the treatment recommended has always especial reference to this class of cases, so that we still have presented to us in books essentially one class of cases, and one method of treatment. This *one idea* state of things leads to serious errors in practice, the treatment itself, whatever it may be, and however good as applied to a certain class of cases, is brought into disrepute by its failure, in many instances consequent upon its erroneous application, and from the pertinacity with which the advocates of the different systems each continue to adhere to one plan of treatment for all cases.

This state of things can only be dispelled by a more extended investigation into the general pathology of lateral curvature, in reference to the constitutional as well as the local conditions under which it arises; and I have endeavoured to prove that these cases differ essentially in their general pathology—*i.e.*, as to the causes and mode of production, and that the indications for treatment, which can only be based upon a sound knowledge of the pathological anatomy, must, therefore, vary in the different classes of cases.

A careful observation of lateral curvature of the spine, during the last ten years, in a large field of public practice, has convinced me that the arrangement and classification of these cases, with special reference to the treatment to be adopted, ought to be based, not so much upon any differences in the form, situation, degree of curvature, and its anatomical conditions, as upon the relative degrees in which the spinal affection can be traced to depend upon constitutional and local causes, with some reference also to the different periods of life at which the curvature may occur.

It is undoubtedly true that the immediate cause of lateral curvature is, as a general rule, purely mechanical, but the associated constitutional conditions are so variable and so important,—acting as the most powerful predisposing causes,—and so materially modify the indications for treatment, that these conditions appear to me to afford the best and most scientific basis for a general classification of these cases which, therefore, I propose to arrange in the three following classes, viz.:—

1*st Class. Cases essentially of constitutional origin, or in which the constitutional largely predominate over the local causes.*—These cases are often hereditary, occurring in two or three generations, and several members of the same family are frequently affected. They are generally associated with the strumous constitution in a marked degree, and may be arranged in two series or subdivisions, according to the period of life at which they occur, viz.: *a.* Those cases occurring in infancy or early childhood, *i.e.*, under three or four years of age; and, *b.* Those which occur in children from seven to ten or twelve years of age.

In the first series there is often no history of hereditary predisposition, and though a strumous diathesis may be feared, such is not clearly indicated; the only apparent cause being general muscular debility which may have existed from birth, or have been induced by illness. The children are unable to support themselves in the sitting position, even when a year or a year-and-a-half old, and a lateral curvature of the spine is very readily produced if the nurse should always carry the child on one arm.

In the second series there is usually a history of hereditary predisposition, and the children in their general aspect are decidedly strumous. The deformity often increases rapidly, and becomes very severe. These cases are sometimes, but I believe erroneously, considered to depend upon rickets; the spine alone is affected, and there are no indications of rickets in the leg bones or in the other bones of the skeleton; no enlargement of epiphyses; no pelvic deformity, or rachitic conformation of the skull.

I think there can be no doubt that constitutional causes largely predominate in the production of spinal curvature when this occurs in children under twelve years of age; and, according to my experience, these cases, from their natural tendency to terminate in severe and conspicuous deformity, are of a very unpromising character.

2*nd Class. Cases depending upon constitutional and local causes in about equal degrees.*—Hereditary tendency is not generally traceable in this class, but exists in some instances. The cases included in this class may be arranged in two subdivisions: *a. Cases depending upon induced constitutional or general debility, combined with local causes acting mechanically, such as described in Class* 3; and, *b. Those clearly of a rachitic character. a.* Lateral curvature of the spine, in the first series of cases, generally occurs between the ages of 12 and 16 years in quickly-growing girls, not of robust appearance, but without any well-marked strumous diathesis or hereditary predisposition; though occasionally one or both of these conditions will be found to exist. This is the class of cases generally described by authors on lateral curvature, as depending upon muscular and ligamentous debility. They constitute the popular form of lateral curvature of the spine, not only from the frequency with which they occur, but from the alarm and often groundless apprehension of deformity which a little spinal weakness at this period of life occasions. In books it unfortunately happens that the descriptions of lateral curvature are nearly always taken from these cases, as if they were the universal type of this affection; and consequently we find one plan of treatment only recommended for all cases,—a most serious practical error. In this series also are generally included that large class of cases which I have already stated may be more properly described as *weak spines*, and which certainly have no claims to be considered as examples of lateral curvature of the spine. There can be no doubt that weak spines frequently pass into or become cases of confirmed lateral curvature, but I have already stated that according to my observation and experience such is rather the exception than the rule, and that certainly more than half the total number of cases of lateral curvature met with in practice are neither preceded nor accompanied by any such condition of general muscular debility. *b. The second series essentially includes cases of lateral curvature clearly of a rachitic character, i. e.* associated with the general rachitic conformation of skeleton, and the curvatures of the long bones of both the upper and lower extremities invariably occurring in this affection; more especially I allude to the dwarfishness of stature and general arrest of development of the bones, most conspicuous in the legs and pelvis; the curvatures of the leg bones, and to a less extent of the bones of the upper extremities, with the enlarged epiphyses; the deformity of the pelvis; and the general conformation of the skull, etc. (a)

(a) For an account of the peculiarities of the rickety skeleton and their explanation, see a very able paper by Mr. Alexander Shaw in the *Transactions* of the Medico-Chirurgical Society, Vol. 17, 1832, London.

This rachitic condition is very seldom hereditary, and I believe is generally dependent upon imperfect lactation. The worst cases which have come under my observation have occurred either in the children of healthy parents or of somewhat delicate but not rachitic parents; and generally only one child is thus affected in a family, the other children being perfectly healthy; occasionally I have seen two or three cases in the same family, and in a few instances all the children in the same family are more or less affected. In every instance, however, imperfect lactation has been clearly traceable, the mother's milk being insufficient in quantity and poor in quality, and the children have generally been half suckled and half fed, the food being of a farinaceous kind, such as *tops and bottoms*, various kinds of biscuits, etc., all of which are unsuited to the requirements of the child during its period of early growth and rapid osseous development. I believe rickets therefore to be an induced and not an hereditary constitutional condition. Lateral curvature of the spine in these cases very rarely occurs at an early period so far as my experience has gone. I have never seen rickety curvature of the spine in the child, and in several cases of rickets in its worst forms now under my care in children from 4 to 16 years of age, the spines are still free from lateral deviation, though the older cases exhibit rather severe lordosis, yet in nearly all the rickety adult specimens in museums, severe lateral curvature forms a conspicuous part of the general deformity. I conclude, therefore, that in cases of rickets, the lateral deviation of the spine usually takes place towards the completion of growth, and continues gradually to increase long after that period, perhaps, even through life, when the equilibrium of the spine has been for a long time disturbed by the deformity of the legs, which are generally of unequal lengths, by the increasing deformity of the feet—rachitic valgus—and by the deformity of the pelvis. I do not deny that lateral curvature of the spine may sometimes be seen in cases of general rachitis, at a much earlier period, say from nine to twelve years of age; but such cases I believe to be exceptional, and their explanation may always be found in one leg being more deformed and shorter than the other, so that confirmed tilting of the pelvis has been produced. As a general rule, the occurrence of lateral curvature of the spine at a late period, in cases of rickets, will, I believe, be found to be correct. This opinion, I am aware, is directly at variance with that of my colleague, Mr. Tamplin, who observes, "when the curvature commences under five or six years of age, as it commonly does in the rachitic cases, an actual compression of the bodies of the verterbæ occurs in the concavity of the curve," &c. (b); but I have already alluded to this opinion in the last lecture, and in explanation observed that a very different class of cases from those which I have described as belonging to the rachitic series, are included by Mr. Tamplin in the rachitic class of distortions, viz., such cases as I have arranged in the first class, generally depending upon hereditary tendency, associated with a strumous constitutional condition. I regard the lateral curvature of the spine, therefore, in the rachitic cases as depending upon the induced constitutional and local causes in about equal proportions; but the local are probably of more importance than the constitutional. In children affected by rickets, the vertebræ are said to be softer than in healthy children; and the general statement is, that in these cases the bones become much more altered in shape than in the other forms of curvature; but this does not appear to be confirmed by an examination of the rickety skeletons in museums. In St. Thomas's, the College of Surgeons, and other museums, are numerous specimens of severe lateral curvature, consisting of the spinal column, with the pelvis attached; and in those specimens in which the pelvis has attained its normal size, and is free from deformity (mostly examples of the cases just described in Class 1), and which we are justified, on this account, in excluding from the class of rickety distortions (c), the vertebræ are seen to be, in many instances, more altered in shape than in the specimens of true rachitic curvature, associated with pelvic and other distortons.

It must be especially borne in mind that it is only in the class of true rachitic curvatures that any distortion of the pelvis takes place, and, therefore, it is only in these cases that any risk to life exists from pregnancy. The importance of clearly defining these cases, and the evidence upon which our opinion should be based in deciding upon the true rachitic character of any case of lateral curvature of the spine, has been already adverted to in Lecture IV., in connexion with the question of special liability to lateral curvature, in consequence of the affection of the bones in rachitic cases; and also in connexion with the question of pelvic deformity, and its influence on child-bearing.

3rd Class—Cases essentially Depending upon Local Causes Acting Mechanically so as to Disturb the Equilibrium of the Spinal Column.—Lateral curvature in these cases may occur at any period of life, though most apt to form in a severe degree previous to the completion of growth. The cases which I propose to include in this class are essentially unconnected with any constitutional affection, or hereditary predisposition, and frequently co-exist with the full natural amount of muscular strength. My late colleague, Mr. Lonsdale, observed "the common lateral curvature occurs most frequently in young women, who, though comparatively of a delicate constitution, do not, as a rule, offer any mark of disease; while there are a very large number who are really fine healthy young women (d).

The local causes which most frequently produce lateral curvature of the spine in this class are the long continuance of certain bad positions, which may be either acquired as bad habits, or rendered necessary by a defective educational system, or certain occupations to which I shall presently refer. As examples of the former, I would mention *standing on one leg*, which is frequently acquired as a mere habit by growing girls. This may produce curvature of the spine even in girls possessing the full natural amount of muscular strength, though it would do so more readily in those who exhibit some muscular debility such as the cases included in the second class. *The long continuance of the sitting and stooping position* during education; I have frequently seen spinal curvature in young ladies who do not exhibit any want of muscular strength, but have been in the habit of sitting as much as eight hours a-day to masters at school, and also in girls who devote most of the day to drawing and writing. *The habit of sitting cross-legged* which some young ladies adopt for several hours a-day whilst reading with a book placed on the knee, one elbow resting on the thigh and the head inclined forwards and resting upon the hand; such a position must necessarily tilt the pelvis and curve the spine in the lumbar and lower dorsal regions, and if long continued in a growing girl, will infallibly produce curvature of the spine. A remarkable instance of curvature produced by this cause came under my observation last year, in a young lady, aged 17 years, who measured five feet eight inches in height, and who had grown four inches a year for three years, according to the statement of her father, who had registered her growth during this period; nevertheless, she presented every appearance of good health, and possessed a full average amount of muscular strength. This habit of sitting cross-legged was evidently the immediate and essential cause of the spinal curvature. Another series of causes may be traced to

Certain Occupations which render the long continuance of some particular position necessary.—From this cause we frequently see spinal curvature both in boys and girls, and though in many instances associated with muscular debility, which would place these cases in the second class, I have also frequently seen spinal curvature thus produced co-existing with the full amount of muscular strength. The occupations which most frequently produce spinal curvature in females are *needlework, envelope and book-folding, flower making, ironing, nursing children, carrying heavy weights*, etc. From ironing and also from nursing children I have seen spinal curvature produced in girls of an unusually muscular and robust appearance, and in such instances many would contend that the excessive use of the right arm was the essential cause, but I believe the position alone with its necessary result of irregular distribution of weight, to be a much more powerful and direct cause of the spinal curvature.

As examples of spinal curvature produced by certain occu-

(b) On "Lateral Curvature," by R. W. Tamplin, page 16. Churchill: London, 1852.

(c) See observations on this point, by Mr. John Shaw; and also by Mr. Alexander Shaw, above referred to.

(d) "Analysis of 3000 Cases of Deformities, with Remarks," by E. F. Lonsdale, published in the *Lancet* September 1, and September 8, 1855.

pations in boys exhibiting great muscular strength, I would refer to the case of a boy who had long been in the habit of carrying heavy goods up a low-ceiled spiral staircase at a pawnbroker's shop. This was a stout, muscular, and vigorous boy, but a severe lateral curvature, as shown in the cast exhibited, was produced by his occupation. Also a healthy, muscular boy under my care, who had been two or three years at a gold-lace factory, and was accustomed to wind the lace, which obliged him to stoop sideways. In addition to the habits and occupations above referred to, I would also mention

Inequality in the Length of the Legs, from any Cause.—By many writers on spinal curvature, especially those of the mechanical school, who undertake to prove mathematically that certain results must necessarily follow from any given mechanical deviations, inequality in the length of the legs has been greatly exaggerated as a cause of spinal curvature; but in contradiction of those mathematical sequences, cases may often be seen in which inequality in the length of the legs has existed for many years, without producing spinal curvature. The fact is, it does not always do so when associated with the full amount of muscular strength. Many patients who have recovered from hip-joint disease with some contraction of the limb, or who walk lame from contracted knee-joint after disease, appear to have curvature of the spine when walking or standing; but when examined lying down or whilst standing with a book under the short leg sufficient to bring the hip-joints to a level, it will be seen that little or no permanent spinal curvature has been produced. The muscular power and active motion appear to prevent spinal curvature in many of these cases.

In cases of inequality in the length of the legs from muscular paralysis and imperfect development of one limb, lateral curvature of the spine in the lumbar region is always produced, but even in these cases it is not often of a severe form.

Inequality in the length of the legs from congenital dislocation of one hip-joint, also certainly produces lateral curvature, but many years are required to bring about this result, and even then it is much less than the mathematical authorities would lead you to expect it must necessarily be.

The same may be said of the cases of congenital shortening of one leg. About six or seven years ago a child was brought to me with congenital shortening of one leg, depending upon deficiency in the length of the tibia and fibula to the extent of about an inch and a-half; the foot was in the position of valgus and the outer malleolus indistinct; I suspected the tibia and fibula were fused at their lower extremities, and that the outer malleolus was either deficient or very imperfectly formed. The leg below knee in this girl is now four inches shorter than the opposite leg; but she is strong and muscular, and very little curvature of the spine has been produced; she wears a high boot with steel supports to the calf of the leg and straps to keep the foot in a straight position. Dr. Little completely rejects inequality in the length of the lower extremities, as one of the causes certain to produce spinal curvature, and observes:—"I have examined no case in which, notwithstanding the shortening, other causes of lateral curvature did not exist. On the contrary, it is very remarkable, according to my experience, that difference in the length of the lower extremities is so rarely accompanied with deformity of the spine."(e)

The effect of a wooden leg in producing spinal curvature has also, I believe, been greatly exaggerated. Although by some authorities it has been attempted to prove mathematically that spinal curvature must result from this cause, I have examined several young men who have worn a wooden leg for five or six years without any spinal curvature being produced; nevertheless, a slight spinal curvature is sometimes seen in these cases.

Among the causes which act mechanically so as to disturb the equilibrium of the spinal column, though not themselves of mechanical origin, I would enumerate *diseases of the chest*, such as empyema, which, after the evacuation of the pus and the permanent shrinking and collapsing of the lung, produces a most severe form of lateral curvature, not, I believe, by the tonic contraction and structural shortening of the muscles on the affected side, as has been explained by Dr. Little (f), but in consequence of the position assumed by the patient, in part from the pain suffered, and in part to favour the increased respiratory action carried on by the healthy lung on the opposite side. Although a very marked loss of balance of muscular power exists in these cases, I believe position, which is only in part dependent upon this disturbed muscular balance, to be the more powerful and more immediate cause of the spinal curvature.

Other diseases of the thoracic and abdominal organs, such as tumours, etc., might be enumerated in the same category, which would also include the cases of lateral deviation, not often severe, which result as consecutive curvatures in cases of caries of the spine after angular projection has taken place, and may occur either above or below the angular curvature.

I have now enumerated the local causes which most frequently produce lateral curvature of the spine essentially unconnected with any constitutional disorder or hereditary predisposition to this affection. The importance to be attached to the disturbed balance of muscular power—undoubtedly existing in many of these cases—as an active cause in the production of the deformity, will be differently valued by those who study these affections, according to the leaning they may have towards the different theories of the production of lateral curvature in its more ordinary forms; but according to the physiological views, which I have explained in the second lecture, I am induced to attach a higher degree of importance to the mechanical effect of the long continuance of certain positions in the production of which the muscles are often entirely passive. When, in many positions assumed by healthy, muscular people, certain muscles are called powerfully into action, the muscular force seems to be exerted rather to prevent or limit the curvature, than to produce or increase it, the muscles in the concavity of curves, as a rule, remaining soft and inactive, while those on the convexity of the curves are tense and prominent.

(e) "Little on Deformities." Page 353.

(f) *Op cit.*, page 362.

ORIGINAL COMMUNICATIONS.

ON

AMPUTATION BY RECTANGULAR FLAPS.

By OLIVER PEMBERTON,

Surgeon to the General Hospital, and Lecturer on Surgical Pathology in Sydenham College, Birmingham.

Three years ago, Mr. Teale, the distinguished Surgeon of the Leeds General Infirmary, communicated to the Profession a new method of amputating the limbs, which he termed "Amputation by a Long and Short Rectangular Flap" (a). His advocacy of this proceeding was founded on the belief that a more useful stump would result than that obtained from the ordinary circular, or transfixion method, that a considerable portion of the weight of the body would be freely borne on its end, and that the mortality attendant on amputations generally would be lessened.

Whilst a perusal of Mr. Teale's monograph will be desirable for the possession of minute details, it will be convenient here to refer to certain features essential in this mode of amputating, and which, in the judgment of its author, constitutes its claim to the favourable notice of the Profession. Wherever, then, the amputation is about to be performed, the circumference of the limb at the point where the bone is to be divided is in the first instance to be ascertained. "Assuming this," says Mr. Teale, "to be sixteen inches, the long flap is to have its length and breadth each equal to half the circumference, namely, eight inches. Two longitudinal lines of this extent are then traced on the limb, and are met at their lower points by a transverse line of the same length" (b). The short flap is indicated by a transverse line passing behind the limb, the length of this flap being one-fourth that of the long one, or two inches.

The long flap, in most instances, will be anterior as regards the position of the body, deviating only in this respect where it is necessary to avoid including in it the main vessels and nerves, as in the upper part of the thigh and arm. It will consist of all the structures dissected upwards from the bone,

(a) "On Amputation by a Long and Short Rectangular Flap." By Thomas P. Teale. London. 1858.

(b) *Op cit.* p. 34.

whilst the posterior, or short one, is completed at once by the knife severing all the soft parts down to the bone, from which they are subsequently separated to the point where it is to be sawn through. Thus formed, the long flap will constitute a complete square, and being bent over the bone, will unite without tension at the angles of the short one.

The advantages which Mr. Teale claims for this mode of proceeding are:—1st. The avoidance of tension. 2nd. The formation of a soft covering for the end of the bone, consisting of parts free from large nerves. 3rd. The non-disturbance of the plastic process, and the consequent placing of the large veins of the limb, as well as the smaller veins of the bone, in a condition the least likely to take up purulent matter and putrid blood or serosity. 4th. The favourable position of the incisions for allowing a free outlet for purulent and other discharges.

From the cases that have occurred in the practice of my colleagues and myself at the General Hospital, the particulars of which, and their comparison with the ordinary methods, I shall give in a tabular statement, I am enabled to speak with some degree of experience as to whether these anticipations have been realised.

Leaving the questions of the durability and sustaining powers of the stump, and the possibly diminished mortality for subsequent examination, I will consider, first, the absence of tension in the early coaptation of the flaps.

In all amputations, no matter where performed, or by what method, more mischief is developed by undue stretching to close the face of the stump, aided by bandages and plasters, than is produced by any other circumstance belonging to the first stages in the treatment of such operations.

The desire for that impossible "union by the first intention" may have much to do with this, especially when it is believed in with deficient materials and an intruding bone; but let this be as it may, we shall rightly give a preference to that form of amputation which enables the most inexperienced to measure his flaps with the closest accuracy.

The rules for measurement, as above laid down, render the fitting of the flaps, under all circumstances, a matter of certainty. The angles of the flaps and the edges of the wound are kept in apposition by wire or thread sutures. These may wear their own way out. The stump is simply laid on a pillow covered with a sheet of gutta percha tissue, and permitted to ooze and discharge unrestrained by dressing or bandage of any description.

Under these circumstances, there can be no tension. Whatever may be the circumference of the limb, the length of the flaps will be equal to the emergency, provided their measurements are accurately assured. A very satisfactory illustration of the truth of this remark occurred in a case under the care of my colleague, Mr. Bolton, [Case No. 10 in the table] where, from long-standing necrosis of the lower part of the femur, the soft parts of the thigh having become enormously thickened, it was feared that the long flap would not prove of sufficient length to overcome the unusual denseness of its tissues; it was otherwise, however, for it fitted without difficulty, and an excellent stump resulted.

The formation of a soft covering for the end of the bone, and the ability of the stump, thus constituted, to sustain the weight of the body wholly or partially, is the next matter for consideration.

Wherever amputation is performed by Mr. Teale's method, I believe that a durable cushiony stump may be obtained, capable of bearing a considerable amount of direct pressure on its face—containing neither large nerves nor blood-vessels, and absolutely devoid of cicatricial tissue, and in many respects, indeed, comparable with the best of all stumps—that which we owe to Mr. Syme at the ankle-joint.

This fact, from the mode in which the soft parts are folded over the end of the bone, and the resulting cicatrix, is rendered distant from the bearing point, can hardly admit of question, and it is no inconsiderable merit in the proceeding that such a description can be given; but whilst we admit thus much, are we prepared, in all situations and under all circumstances, to abandon the transfixion and circular methods in its favour?

All who amputate much, and care to examine the stumps in after years, when wear and tear have told their story on their shapes, know that in by far the more numerous instances they fail in the promises they seemed to give of being able to sustain a direct pressure on their ends, and in many cases degenerate so as to become frequent sources of annoyance, and even of disease.

This inability to bear pressure is especially observable in amputations of the lower third of the thigh and of the leg, when performed, as has hitherto appeared to be most desirable, in these situations, by the circular, in preference to the transfixion method.

The length of limb left in these instances is a strong temptation to both patient and mechanician to try what the face of the stump will bear. But the experiment does not succeed, and has shortly to be abandoned in favour of the tuber isehii on the one hand, or the lower part of the thigh on the other.

The method of amputation proposed by Mr. Teale appears to me, in these situations, to have supplied that want which the plans in previous use failed to afford. It has, indeed, only one drawback, that arising from the length of the long flap necessitating that the bone must be sawn through higher up than in either of the ordinary modes; for though in some instances it may be possible to get a long flap from the anterior surface of the ankle-joint, it will not be prudent to take one too close to the patella, for the chances of sloughing are by no means in this spot to be forgotten.

In other parts of the thigh and leg the short anterior and the long posterior flaps, obtained by the ordinary transfixion method, appear to me to answer everything desired when properly shaped. There ought to be, and I believe there is, in such instances, an entire absence of tension. The healing process may proceed undisturbed by strappings and dressings, and as to the large and small veins being possibly more exposed to take up purulent matter—considering that the discharges can readily escape, and that the vessels divided have been so by the cleanest sweeps of the knife, in contrast to a somewhat niggling and tedious dissection, I am at a loss, on these grounds, and in the absence of any special statistics to the contrary, to understand why a preference should be claimed for the proceeding of Mr. Teale.

Flaps thus formed unite with their line of cicatrix well above the point of pressure, and can, in consequence, take their share in bearing the weight of the body. Moreover, as all the soft parts from behind go to form the long flap, these appear to me to be as truly folded over the bone to form the future cushion, as the same materials from the front are most correctly described to be in the plan of Mr. Teale.

I am by no means therefore prepared to abandon transfixion in these situations in favour of the rectangular method; but, as regards a circular amputation in the same localities, on the ground that the end of a bone must be more capable of bearing pressure when covered by a mass of soft parts, than when only protected by an adherent cicatrix, I should always, where practicable, rather advise recourse being had to transfixion or the rectangular flaps.

In the upper arm the modes of amputation as at present carried out, whether flat or circular, appear to me to satisfy all the requirements that the Practical Surgeon or mechanician can desire, whilst in the forearm from the peculiarly tendinous character of the part, and the necessity, always imperative, to keep the stump as long as possible, I deem a change to the rectangular method to be decidedly objectionable.

In this great machinery district, accidents requiring amputation in various parts of the forearm are of most frequent occurrence, and from time to time every possible contrivance is required in the substitute to be provided for the loss of the skilled hand of the artisan; yet, during nearly fifteen years that I have watched the many stumps that have been made at our Hospital, I can hardly call to mind an instance in which the circular method—the soft parts being sloped off from bone to skin—did not best meet the present and future exigencies of the case. This statement is, I am sensible, at variance with the opinion of some surgical authorities; but, apart from injuries, in which no choice remains than to make the best of what is left, I must confess my inability to form any other conclusion.

In addition to the advantages that have already been alluded to, as claimed by Mr. Teale for his mode of operating, there is one yet remaining for consideration, that of diminished mortality, a deeply important fact, in the truth of which he expresses his belief, so far as the number of cases in which a comparison can be instituted, enables him to determine.

Before, however, referring to the conclusion, drawn from

TABLE OF AMPUTATIONS BY RECTANGULAR FLAPS, FROM JUNE, 1859, TO AUGUST, 1861.

No.	Date.	Name.	Age.	Accident or Disease.	Part Amputated.	Operator.	Result.	Remarks.
	1859.							
1	June 15	Henry G.	36	Disease	Forearm	Crompton	Recovery	Secondary hæmorrhage on fifth day from inter-osseous artery. Flaps opened and vessel secured. Twenty-three days after operation was dischared with a perfect stump. When seen twelve months afterwards the stump was quite as good.
2	September 14	William S.	14	Disease	Leg	Pemberton	Recovery	Stump perfectly healed four weeks after the operation.
3	December 14	Francis F.	29	Disease	Leg	Crompton	Death	A bad subject, with symptoms of tubercular disease in lungs. Died five weeks afterwards, from pyæmia, and suppurative obstruction of the lungs.
	1860.							
4	January 13	Francis G.	25	Accident	Leg	Pemberton	Recovery	On the day following the operation the flaps were opened to secure three muscular arteries that bled freely. Two inches of anterior flap sloughed during first week. Seventeen days after the amputation the note recorded was, "That, though the flaps had almost entirely sloughed away, the bones were still well covered, and the surface granulating." The stump finally healed well, with exfoliation of bone.
5	January	Richard R.	44	Accident	Leg	Pemberton	Recovery	Lacerated wound of inner side of ankle, leading to hæmorrhage from posterior tibial artery. Amputation was performed four weeks after the accident. Almost the whole anterior flap sloughed. The ends of the tibia and fibula exfoliating. The stump was not entirely healed for eight months.
6	February 1	Mary D.	19	Disease	Leg	Pemberton	Recovery	
7	February 1	Betsy T.	18	Disease	Leg	Bolton	Recovery	
8	February 29	Joseph R.	23	Disease	Thigh	Crompton	Recovery	Long-standing strumous disease of knee and phthisis. Amputation in lower third of thigh. Blood-vessels successfully secured by acupressure. Union was almost perfect three weeks after the operation.
9	April 11	Adam S.	17	Disease	Thigh	Baker	Death	The operation was performed in upper third. The femoral artery was controlled by acupressure, but, as bleeding occurred half an hour after the operation, it was secured in the ordinary way. Bleeding occurred again nine hours after, while vomiting. Vomiting continued, and he sunk from exhaustion on the 13th.
10	April 11	Martha H.	20	Disease	Thigh	Bolton	Recovery	The operation was performed in the middle third. The anterior flap was enormously thickened from long-standing disease, the result of necrosis of lower third of femur, notwithstanding an excellent stump resulted.
11	April 17	Tobiah L.	14	Disease	Thigh	Pemberton	Recovery	
12	April 20	Barnet S.	15	Disease	Thigh	Pemberton	Recovery	The operation was performed in lower third, and the anterior flap taken from close to the patella. Eight days afterwards almost the whole of the anterior flap sloughed, exposing the bone. By June 12 the stump was healed, and the end of the bone well covered by a good soft pad. By the cicatrising process the remainder of the long flap was drawn over the end of the femur, the cicatrix being in the position it would have been had no sloughing occurred.
13	May 9	Henry W.	34	Disease	Leg	Crompton	Recovery	Operation in middle third. Three days afterwards cellular inflammation of leg took place, resulting in necrosis of the end of the tibia. The stump became sound on this being removed, July 6.
14	July 5	Sarah H.	45	Disease	Forearm	Pemberton	Recovery	
15	July 25	Martha S.	48	Disease	Forearm	Bolton	Recovery	
16	November 14	Arthur B.	26	Disease	Thigh	Pemberton	Death	Eighteen months previously the knee-joint had been excised for strumous disease, and, though the limb was in excellent position, yet, from the want of solid union, and from cellular inflammation, it was altogether useless and becoming painful, and hectic being present, amputation was performed in lower third. Obstinate sickness came on immediately after the operation, and continued for seven days. Subsequently he had erysipelas, and died from exhaustion in sixteen days. There were no evidences of pyæmia in the post-mortem examination.
17	December 24	George P.	21	Accident	Forearm	Crompton	Recovery	
	1861.							
18	March 9	John F.	20	Accident	Leg	Bolton	Death	Operation was performed in upper third of limb. He was suffering from shock on admission, and never fairly rallied after amputation, dying on third day.
19	April 6	George C.	35	Accident	Leg	Pemberton	Death	Operatiou was performed in middle third of limb, a few hours after the accident. Four days after the operation sloughing of the stump took place, and he died of exhaustion in twelve days.
20	July 14	William H. P.	30	Accident	Thigh	Crompton	Recovery	
21	August 14	Isilire L.	29	Disease	Leg	Bolton	Recovery	
22	August 21	Elizabeth F.	36	Disease	Thigh	Crompton	Recovery	

TABLE OF AMPUTATIONS AT THE BIRMINGHAM GENERAL HOSPITAL BY OTHER METHODS, FROM FEBRUARY, 1859, TO MAY, 1861.

No.	Date.	Name.	Age.	Accident or Disease.	Part Amputated.	Operator.	Result.	Remarks.
	1859.							
1	February 2	John H.	13	Disease	Thigh	Bolton	Recovery	Circular in middle third of thigh.
2	May 11	Joseph D.	53	Disease	Thigh	Pemberton	Recovery	Flap in lower third of thigh.
3	August 26	Thomas S.	45	Accident	Leg	Pemberton	Death	Flap in upper third of leg. Died of phlebitis in sixteen days.
4	September 14	Thomas C.	27	Disease	Leg	Pemberton	Recovery	Flap in upper third of leg.
5	October 26	Maria F.	38	Disease	Leg	Bolton	Recovery	Circular in upper third of leg.
6	November 9	William C.	15	Disease	Leg	Baker	Recovery	Flap in lower third of leg.
7	December 16	J. H.	10	Accident	Thigh	Pemberton	Recovery	Circular in lower third of thigh.
	1860.							
8	February 1	J. H.	27	Accident	Leg	Crompton	Recovery	Circular in upper third of leg.
9	February 15	J. F.	40	Disease	Leg	Pemberton	Recovery	Circular in middle third of leg.
10	March 26	Henry D.	21	Accident	Thigh	Crompton	Death	Circular in lower third of thigh. Died of pyæmia in nine days.
11	May 30	William B.	18	Disease	Thigh	Crompton	Recovery	Flap amputation in upper third of thigh.
12	August 15	Sarah S.	54	Disease	Forearm	Crompton	Recovery	Circular in upper third of forearm.
13	August 15	John G.	30	Disease	Leg	Crompton	Recovery	Flap in upper third of leg.
14	September 18	John L.	10	Disease	Leg	Bolton	Recovery	Flap in upper third of leg.
15	October 3	John S.	58	Disease	Thigh	Pemberton	Recovery	Flap in lower third of thigh.
16	October 24	Thomas K.	19	Disease	Leg	Crompton	Death	Flap in upper third of leg. Died of pyæmia in nine weeks.
17	October 30	J. G.	50	Accident	Leg	Bolton	Death	Flap in middle third of leg. Died of shock in eight days.
18	November 7	W. B.	26	Disease	Thigh	Pemberton	Recovery	Circular in lower third of thigh.
19	December 13	William R.	16	Accident	Forearm	Baker	Recovery	Circular in lower third of forearm.
	1861.							
20	January 14	James C.	24	Accident	Forearm	Bolton	Recovery	Circular in lower third of forearm.
21	April 3	William W.	19	Disease	Forearm	Baker	Recovery	Circular in lower third of forearm.
22	May 16	Martin H.	12	Accident	Thigh	Bolton	Death	Circular in lower third of thigh. Died of pleuro-pneumonia following on long-standing tubercular disease.

an examination of the large number of cases submitted to operation at the Leeds Infirmary during the past six years, I will proceed to notice the results of the cases of amputation by rectangular flaps that have occurred in the practice of my colleagues and myself in the General Hospital during rather more than two years, and for convenience of examination avail myself of a tabulated form, excellently drawn out by the House Surgeon, Mr. W. P. Goodall, to whom much of the after success of these cases is owing, from his having, in the closest degree, followed out in their treatment the injunctions laid down by his friend Mr. Teale. A second table, of a like number of cases, is also added, in which amputation was performed by the ordinary methods, during the same period of time, and in corresponding situations.

Table No. 1 shows that of 22 amputations by Mr. Teale's method 5 died and 17 recovered, being at the rate of 1 death in every $4\frac{2}{5}$.

Of these cases 16 were amputated for disease and 6 for accident. In the 16 for disease there occurred 3 deaths, being at the rate of 1 in every $5\frac{1}{3}$, while in the 6 for accident there occurred 2 deaths, being at the rate of 1 in every 3.

Of these deaths 1 occurred from pyæmia in the presence of tubercular tendency. One from hæmorrhage; 1 from exhaustion after long-standing disease; 1 from continued shock after an accident; 1 from exhaustion following an accident.

Table No. 2 shows that of 22 amputations by ordinary methods 5 also died, and 17 recovered; the rate of mortality being absolutely identical. Of these cases 14 were amputated for disease, and 8 for accident. In the 14 for disease there occurred 1 death, being at the rate of 1 in 7, while in the 8 for accident there occurred 4 deaths, being at the rate of 1 in every 2. Of these deaths 1 occurred from phlebitis (amputation for disease); 2 from pyæmia (traumatic); 1 from continued shock (traumatic); 1 from pleuro-pneumonia following on long-standing tubercular mischief.

Any conclusions that we might venture to draw from these tables must, on account of their number, be at present unsatisfactory, and I have on that account not further analyzed the situations in which the different kinds of operation were performed; but at any rate they show we are not warranted in ascribing a diminished mortality to Mr. Teale's method, so far as the experience contained in the cases I have narrated enables us to form an opinion.

A reference to the remarks appended to some of the cases in table No. 1 will also, I think, show that the rectangular amputations were not exempt from the ordinary occurrences that belong to large amputations—such as the reopening the flaps to tie vessels, and the advent of sloughing and necrosis. Secondary hæmorrhage occurred in Cases 1, 4, and 9. Sloughing of the anterior flap in Cases 4, 5, 12, and 19; of these 4, 5, and 19 were traumatic. In 12 the flap was taken close to the patella in structures perfectly natural, yet it sloughed—the stump becoming afterwards well covered. Necrosis and exfoliation in 4, 5 and 13.

In a recent paper, (a) entitled "Statistics of Amputations at the Leeds General Infirmary during Eight Years," Mr. Teale gives an account of 189 amputations of all kinds; of these, 103 were by the rectangular method, and 86 by other operations. The mortality in the 86 by other methods than the rectangular was 30·2 per cent., or 1 in 3·3. In the 103 by the rectangular operation it was 18·4 per cent., or 1 in 5·4. The comparison is here manifestly in favour of the rectangular method, and a particular reference to the statistics as elaborated under the heads of pathological and traumatic will in no respect tend to lessen the value of this fact.

Considering then that these cases have occurred within the walls of one Institution—have been operated upon by the same Surgeons, being thus exposed to similar influences, it cannot be denied but that a strong case has been established in favour of the proceeding. It will be, however, for other Hospitals, whose officers may amputate after this plan, to publish their experience; as a diminution in mortality so significant as that just recorded cannot but be regarded with profound attention by all practical Surgeons.

In tracing the causes of this favourable comparison, the Author reiterates his belief that they are due to the peculiar character of the flaps ensuring ample covering for the bone, and dressing without disturbance—conditions eminently calculated, he also believes, to lessen the chances of sloughing and the occurrence of exfoliation and necrosis.

In reference generally to this mode of operating as originated by Mr. Teale, my own observation and experience leads, then, to the following conclusions:—

1. That an admirable covering for the end of the bone is in almost all cases attainable, capable of bearing direct and continued pressure in locomotion.

2. That in the lower third of the thigh and in the lower third of the leg a more serviceable stump is obtained than can be produced by any other mode of amputation at present in practice.

3. That in other parts of the same limbs the flap amputations in ordinary use realize all that is promised by the rectangular method; and as the bone does not require to be sawn through so high up by some inches in the former as in the latter operation, they are, in the majority of instances, preferable.

4. In the upper arm and forearm the rectangular method

(a) See *Medical Times and Gazette*, July 6, 1861.

is by no means to be recommended in preference to the circular and flap methods.

5. That at present we are not warranted in assigning to rectangular amputations any special immunity from sloughing, the chances of necrosis and exfoliation, or from phlebitis and pyæmia, in comparison with other amputations.

6. The question of diminished mortality rests on the 103 cases recorded by Mr. Teale, and, so far as that gentleman's experience extends, is eminently in favour of the rectangular method.

Birmingham.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

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AND BY

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BROMIDE AND IODIDE OF POTASSIUM IN EPILEPSY.

Cases and Clinical Remarks by Dr. Wilks.

In reference to the subjoined cases Dr. Wilks has favoured us with the following clinical remarks:—It is well known that epilepsy or epileptiform fits may result from various causes, existing both within and without the brain; dependent, that is, upon organic changes of structure or upon the condition of blood circulating through the organ. As so many causes produce epileptiform symptoms, it is necessary to ascertain in the first instance how the term is to be defined. Now-a-days it is pretty generally admitted that epilepsy is a disease which exhibits on the post-mortem table no structural change. Moreover, it is a disease which may last for years, and leave the patient in tolerably good health in the intervals of the fits. Very different, however, are the convulsions arising from organic disease of the brain, which can only endure for a limited period, and then sooner or later have other symptoms to accompany them. So also "fits" arising from impure blood from renal suppression. With this general understanding of the subject, although during life, from the obscurity of the symptoms, history, etc., it may be a question as to the existence of true epilepsy or not; yet if on post-mortem examination we find a diseased kidney or an organic disease of the brain, we may come to a correct conclusion as to the nature of the case, and we style that alone epilepsy where no marked organic disease is found. Generally speaking, tumours in the brain show other symptoms sufficiently diagnostic. The most difficult cases to distinguish from pure and simple epilepsy are those where either from disease of the bones of cranium or membrances, an adhesion occurs between the latter and the brain, which produces a class of symptoms not distinguishable in many instances from true epilepsy. Bright very sagaciously observed that in epilepsy arising from a local cause, where the whole brain is not affected, consciousness often remains; this no doubt is often true, but whether a sufficiently marked symptom to afford the basis of a diagnostic difference between this form and others, we can scarcely say.

We have made these remarks in order to explain, as we think, a treatment which is singularly efficacious in those cases of epilepsy which are due to a local affection arising either from syphilis or injury. Every Practitioner could quote from his experience cases where a most remarkable success has resulted from the use of iodide of potassium when the cause has appeared to be syphilitic, and also now and then a case where a course of mercurials cured the patient. As it is, however, often difficult to recognise such a cause, we have of late years, before commencing the ordinary and most approved anti-epileptic remedies, began the treatment with the iodide or bromide of potassium. We formerly gave the iodide, but subsequently changed it by way of experiment for the bromide on account of having seen better results with the latter remedy in cases of bronchocele and glandular swellings. About this period, also, the bromide was recommended by Sir C. Locock as a remedy having some influence over the ovary in females, and therefore curative of those epileptiform affections which might be due to an irritation of this organ. Although this theory was questionable, yet if it were founded on any facts showing the efficacy of the remedy, this was an additional reason for adopting it; and we thought equally good for all cases, whether men or women. Since using this remedy, Dr. Wilks added, now for two or three years, and in a large number of cases, he had undoubtedly had more success than heretofore, being fully aware, he said, of the remarkable fact that epileptics generally seem to be better on any new remedy, whatever its nature may be, and, also, that should it exert a real influence, that the benefit is often only temporary. The *rationale* of this success is connected, we imagine, with the remarks just now made, that many cases of epilepsy depend on a local affection of the bones or membranes which the remedy removes by its absorbent powers.

Not that we can prove the existence of any such cause in most instances, but knowing the value of the medicine where such cases do exist, we have explained its *modus operandi* by its selecting out these cases for cure. That epilepsy may exist for years, and only at death a local cause be found, we know from several instances, and in such there has been no difficulty in discovering a history of injury at an early period of life. Another explanation for an occasional cure by this remedy may be found in the fact, that fits arise sometimes from lead poisoning, and that the iodide or bromide of potassium is instrumental in eliminating the poisonous metal from the system. In two or three cases we have seen epileptiform fits arising from lead poisoning, and in which iodide of potassium was used with success. In this way it may sometimes have been supposed to have cured epilepsy.

Knowing how apt we are to be deceived by the operation of a new remedy, I do not speak more peremptorily on the subject, but add a few cases; only stating that I continue to use it in all new cases which come before me, believing it to be wise to adopt some such remedy in the first instance.

Case 1.—Cecilia D., aged 22, came to the Hospital in April, 1860. Her mother accompanied her, as she was unable to find her way and was childish in her manners. The former, indeed, never left her night nor day, as she generally had two or three fits a-day. They had existed many years, but for two years had occurred daily. She had more than once fallen into the fire and burned herself. She was ordered five grains of bromide of potassium three times a-day. The fits soon began to grow less in number, but the improvement was not very marked until her visit on June 6, when she had had no fit for three days, and in the following week, the 13th, had had none. After this they occurred at long intervals. She persisted in the medicine, with the exception of a week or two, and the report was. on October 24, "No sign of a fit for two months." At the end of another month, there having been no attack and her health improved, she ceased to attend. On February 13, 1861, she came again to the Hospital; she had remained well ever since (nearly six months) until a few days before, when, having lost a brother suddenly, she was seized with four fits in succession. She commenced the same medicine again and persisted in it for six weeks, until her letter was out, when, having had no return of the fits, she was dismissed. This girl thus not only lost her fits, but became more robust and in better health, a fact, Dr. Wilks said, he has noticed in similar cases, that as the disease recedes so does the health improve. In this particular case it might be thought that with such a striking result some syphilitic taint was present, but none such was discoverable.

Case 2.—Amy M., aged 13, came as out-patient with fits in March, 1860. She took bromide of potassium in three-grain doses, and the fits soon ceased. At the end of three months none having occurred, she left. This case is unsatisfactory as a long interval sometimes intervenes between the attacks.

Case 3.—Alfred C., aged 36, a worker in lead, came to the Hospital on June 13, 1860. He was a very feeble man, and had a remarkably sallow or waxy complexion, and had a blue line on the gums. He had fits and some hesitation in

his speech. He took the iodide in three-grain doses, and left at the end of two months in much better health, and with a cessation of the fits.

Case 4.—Francis K., aged 34. For two years he had been subject to fits. At first they appeared at long intervals; afterwards, about once a month, subsequently, about twice a week. He stated that he fell without any notice, and struggled violently. He was ordered the bromide, and when he left, in December, 1860, he had had none for ten weeks. He was seen some weeks afterwards, and he stated that he had had a slight warning twice, but never a decided paroxysm.

Case 5.—Louisa C., aged 54, came to the Hospital on November 21, 1860. She had been subject to fits for about a year, and of late had had several a day. Ordered four grains of the bromide. On January 2 she had had on an average about one fit a week. On January 16 had had two fits. She had none after this until she left, at the end of February. Several months afterwards Dr. Wilks saw this patient, and she had had no symptom of a seizure, and then it seemed, on whatever cause they were dependent, that she was absolutely cured.

Case 6.—Agnes J., aged 26, came to the Hospital on November 14, 1860. She had had fits ever since ten years of age, and on an average had had one a week. Of late they had been more frequent, and having had four in ten days, she applied for advice. She was ordered three grains of the bromide three times a-day. The fits soon began to decrease in frequency, and when she left in January she had none for a fortnight. This case is unsatisfactory.

Case 7.—Martha L., aged 29. She came on December 19, 1860. She was said to have had fits only for eight weeks, which, as far as could be learned, appeared to be truly epileptic. She had had nine in the week previous. She was ordered the bromide. She had only one fit since, on January 9. They then ceased altogether, and when she gave up her letter at the end of the month had no return. This case also is unsatisfactory.

Case 8.—Henry Y., aged 40. He came to the Hospital in September, 1860. He had fits daily, sometimes two or three a day. He was ordered three grains of the bromide three times daily. This patient, after a time, improved considerably, but being an old case, the medicine was persisted in. At the expiration of four months, in January, 1861, he had had only eight fits since the commencement of the medicine, and had had none for three weeks. He continued until the end of the month, when, having no return of the fits, he gave up his letter.

Case 9.—Jane E., aged 22. She came to the Hospital on December 19, 1860. She had had fits for a year, and at various intervals, sometimes two or three a week. She took the bromide for two months, and then gave up her letter, having had no fit during this time, and only on one occasion symptoms of one. This case also is unsatisfactory.

Case 10.—Valentine M., aged 7. This was a very bad case of epilepsy. He had had several fits daily for the last three months. He took the bromide for three weeks with no improvement, afterwards zinc, and other remedies, but without success. He then desisted from all medicine. In the course of a week or two the fits spontaneously ceased, and three months afterwards he had only had slight symptoms. Unsatisfactory as regards the bromide.

Case 11.—Charles S., aged 10. He had suffered from fits for two years. They sometimes occurred daily, but occasionally at a week's interval. On one occasion he was free for two months. Before coming to the Hospital he was much worse. Ordered the bromide, which he continued for three months, when, having none after the first fortnight, he ceased to attend.

Case 12.—George F., aged 19. His fits commenced two years ago. Generally they occurred daily for several days, and then ceased for a few days. Ordered the bromide. This young man continued under notice for several months, and was upon the whole considerably better, though the fits occurred occasionally. When last seen had had none for more than two months.

The following case lately occurred in the Hospital:—

Case 13.—John S., aged 33, was admitted on June 5, 1861, for epilepsy. He was at the same time very cachectic; he was thin, and his mind was dull. He said he had had fits for one year and a half. He had had pain in the head. He was too feeble to rise from his bed, and at a few days' intervals had epileptic attacks of a very severe character. He had various treatment until August, when he was much worse; had seven fits in one day, and in the intervals was delirious. He was then ordered ten grains of the iodide of potassium three times a day, and at once began to improve. The fits left him; he became stronger and stouter, and left his bed. He continued the treatment for two months, when he left the Hospital, comparatively well.

CHESTER GENERAL INFIRMARY.

A CASE OF FOREIGN BODY IN THE MALE BLADDER.

[Communicated by Mr. Essex Bowen.]

It cannot be denied that it is as desirable for the advancement of Professional experience to make known those cases in which we have been misled, or which have resulted unsuccessfully, as it is to publish histories of those gratifying results which have proved our diagnosis and treatment to have been sagacious and beneficial.

The following, occurring as it does shortly after the publication in the *Medical Times and Gazette* of several allied cases, seems worth recording:—

H. D., aged 33, a healthy, temperate man, came to me on the morning of October 7 last, with this story. He had been the subject of stricture of the urethra for the last two years, and was accustomed to pass occasionally a bougie for himself. That morning in endeavouring to extract the gutta-percha bougie which he had introduced it had broken off, leaving (as he believed) about five inches in the urethra and bladder. An abrupt hardness (as if the broken end of the bougie) was obscurely felt in the perinæum. He desired to pass his urine, but was totally unable to do so. Repeated efforts to seize and draw out the end of the bougie with one of Weiss's instruments for extracting small calculi were unsuccessful. An incision was then made in the perinæum with the hope of at once coming upon the point of the bougie; by this time, however, the fragment had been so drawn in towards the bladder that it could not be felt through the wound. The man was now enabled to pass his urine, and was much relieved.

It was found impracticable, on account of the original stricture or the obstacle of the offending bougie, to introduce an instrument into the bladder, for the purposes either of exploration or of guidance; inasmuch, therefore, as the man was free from distress, and able to urinate, no further interference was now made.

After the lapse of nine days, during which everything, save some slight irritation of the bladder, remained stationary, an examination of the urethra and bladder was made under chloroform. With some difficulty, though without the employment of force, a moderate-sized silver catheter was passed, as was supposed, into the bladder. Nothing of the broken bougie could be detected. Four ounces of warm water were now injected, and the lateral operation for lithotomy performed for the removal of the bougie. When, however, the deep incision into the groove of the staff had been completed, and a careful examination made with the finger, I felt assured that the bladder had not been entered, and that the staff had guided me into the subjacent cellular tissue. Upon the deeper portion of the incision being made, the injected water gushed out through the wound. But my conclusion was based upon the impression received from the finger examination, which disclosed an undefined space, intersected here and there by slender fibrous bands.

There being no guide to the proper course of the urethral passage, as well as no demand on the part of the patient's condition for any immediate further step, I resolved to wait.

On the following day the man was tolerably easy, quite free from pain, and capable of exercising perfect control over his bladder. The urine, however, was entirely voided through the wound, the patency of which was promoted by the insertion of a thin strip of lint (which the patient was directed to remove when he desired to urinate), as well as by the daily passage of a stout portion of gum elastic catheter. It was hoped that the broken bougie would be either thus expelled with the gush of urine, or that, at least, it would be so far protruded as to enable me to extract it.

Some slight symptomatic feverishness, as well as tenderness of the hypogastric and right iliac regions which ensued, soon yielded to treatment. The discharge of pus from the wound became abundant about the seventh day; and, in addition to the use of a straight elastic catheter introduced six inches into the wound, the latter was well syringed daily with warm water, and every aid was rendered to the voidance of the somewhat fetid pus.

Four days after this, two fragments of the bougie (measuring three inches), coated with phosphates, were passed by the wound. But when the remainder was sought for, nothing whatever could be detected, notwithstanding that a slender polypus forceps readily reached and explored the interior of the bladder.

The man's general condition continued to improve, and, in the course of a few days, I made (with the aid of chloroform) another endeavour to reach the foreign body. I dilated the perineal wound, which had now become reduced to a sinus, and passed a forceps into the bladder. Nothing, however, could be found, and after patient though ineffectual efforts to discover the remaining fragments, the man was replaced in his bed.

On the morning following, I found him happy and comfortable. Three thick portions of bougie, very densely covered with urinary deposit, had passed during the night by the wound. Their conjoined length measured four and a-half inches. From this time the patient made steady recovery, and there was every reason to conclude that the intruding bougie had been entirely expelled.

Remarks.—There are many points in this case which deserve mention. The sources of doubt and difficulty attending it seem to have been precisely those, the absence of which, in previous examples of the accident, has rendered such cases so successful or so fortunate.

Since the days of Hunter there has been occasional record of "spontaneous" expulsion of the foreign substance; and many a Surgeon has been fortunate or skilful enough to extract by way of the urethra. When, however, patience and effort have become exhausted, our only remaining indication is the lateral incision, by which access is gained to the bladder.

In the case before us the expedient of cutting down through the perinæum upon the bougie-point promised ready success; but, when the parts had been, from the lithotomy posture, stretched and altered, all trace was lost, and the instrument seemed to have been almost at once sucked into the bladder.

The happy termination of the reported cases of spontaneous expulsion, fairly justified, in the absence of urgent demand for interference, the expectant plan here followed.

Adopting, in due time, the only course now left, our remedy broke down by reason of the misguidance of a false passage, situated absolutely in the median line, and so far simulating the interior of the bladder as to have misled the judgment of more than one experienced Surgeon.

Here, then, lay the distinguishing feature of the case. There was no access to the bladder by means of staff or sound, and the point of departure from the urethral passage was not discoverable. From the position of the staff at the operation, and other reasons, it was presumed that the divergence was in close proximity to the neck of the bladder, and the facility with which the urine was subsequently drawn off through the wound, showed this to have been the case.

Ingress to the bladder having been once effected (though only by means of the gum elastic catheter through the wound), it was reasonable to hope for the expulsion thus of the bougie.

Again, the difficulty of detecting the broken fragments with any instrument thus introduced is sufficiently interesting. It was an additional impediment to the man's recovery, as well as another source of perplexity in the management of the case; and I believe it is to be accounted for by the entanglement of the several pieces of bougie, on their outward progress, both in the urethra itself, and also in the deep parts of the wound adjacent to it.

Although no trace of the offending substance could be detected either with a metallic catheter or with the forceps passed into the bladder, a roughness could now and then be felt upon introducing the gum elastic tube. This, however, could not be always found, and I was never able to discover it with an unyielding metallic instrument.

The man's urethra is still the seat of an almost impassable stricture, and he requires much care in the future management both of the original obstruction and of the deceptive opening with which we have had to deal.

ST. THOMAS'S HOSPITAL.

HYSTERICAL CONTRACTION OF NECK AND BACK—TREATMENT BY LARGE DOSES OF SULPHATE OF ZINC AND CHLOROFORM INHALATIONS.

(Case under the care of Dr. PEACOCK.)

Elizabeth R., aged 15, admitted December 18, 1860. She said that on August 18, 1860, she had in the afternoon a pain in the neck, and that towards evening, the pain continuing, her head was drawn to the left side. From that time, varying in severity, the pain had continued; but sometimes for a day or two the head would be quite straight. She has pains at times in her neck which sometimes go up into her head, but no headache, ordinarily so-called. Except for the one symptom, that her neck was drawn down, she felt in good health, excepting a little tenderness at the lower part of the neck. No pain in the spine was elicited by percussion or by pressure, and there was no loss of power in the arms. Except a chronic cough and the history that when nine or ten years old "her back was not quite straight," she had had no marked illness. Her father was in a lunatic asylum having been insane four years, and her mother, she said, was an in-patient of the Brompton Hospital for Consumption. She had one sister younger than herself quite well.

Dr. Peacock prescribed a draught containing two grains of sulphate of zinc and a quarter of a grain of extract of belladonna in infusion of calumba three times a day, and five grains of an aloetic pill every night. The dose of the sulphate of zinc was increased gradually until the 31st, when the amount was three grains six times a-day.

In order with greater certainty to examine the condition of the neck, chloroform was given and she was for a few minutes quite insensible. Her neck could then be easily straightened, but it became contracted again as soon as the effect of the chloroform began to pass off.

January 3.—Dr. Peacock ordered a draught containing seven grains of sulphate of zinc and twenty drops of fœtid spirits of ammonia in infusion of valerian three times a-day. On this day chloroform was again given by Mr. Phillips. He found that whilst completely under its action, the muscles of the neck being quite relaxed, the head lay in any position into which it was placed, lying over to either side; but on consciousness returning, it resumed its former contracted position. But until pressed into its proper position the shoulder still remained elevated and the head drawn over towards that side, and it was noticed that even when decidedly under the influence of chloroform, there was still some hardness on the right, or uncontracted side of the neck. For about five minutes, during which time she was decidedly under the influence of the chloroform the relaxation continued; then the intelligence was only gradually restored, and during that time the relaxation continued, but contraction suddenly recurred on restoration of voluntary motion.

10th.—Since the last note the contraction has apparently been quite as great. There has been no other symptom of hysteria. There was certainly no impairment of secretion, nor of motion in any of the limbs. The pupils were somewhat larger. The extremities were cold and congested. Chloroform was again administered. The dose of the zinc was now increased to eight grains.

On the 17th and 24th, and on February 4, chloroform was given. On February 7 twelve grains of the sulphate were given three times a-day.

February 11.—Since the last notes were taken she has continued to have the chloroform once a-week, and to take the sulphate of zinc (twelve grains) in valerian three times a-day. There was a little improvement, the shoulders and head being somewhat less approximated.

18th.—Thirteen grains of the sulphate of zinc were given, and chloroform was again administered.

21st.—The zinc has produced no sickness. She is straighter, and the contraction is much less. The appetite is good, and the catamenia have appeared again. She has been placed

under the influence of chloroform once a-week, and seemed to require a larger quantity to produce its full effect.

On May 30 the following note was made:—"She has steadily improved. The sulphate of zinc was increased gradually, so that, on April 25, the dose was twenty grains three times a-day. There was then a little sickness, and quinine and iron were given instead of the zinc. On April 18 tepid shower baths were ordered, and on May 2 cold shower bathing was ordered."

Her condition was very much improved. When last seen the shoulders were about equal in height, but when she was spoken to, the left shoulder still became somewhat elevated. Her general health also was good. She was stouter, and the catamenia were regular.

KING'S COLLEGE HOSPITAL.

SPONTANEOUS DISLOCATION OF PATELLA.

(Under the care of Mr. WOOD.)

[Reported by Mr. MAUNDER.]

Margaret H., aged 13, a native of the West Indies, was admitted on September 13, 1861. Five years ago she had rheumatic fever, and the inflammation affected the left knee especially. On her convalescence from the fever the knee continued swollen; she had no pain in it; could walk. At this time the patella began to slip out of position, being dislocated outwards whenever she bent her knee; on straightening her leg the bone went into position again. The dislocation and reduction were painless. On walking, sometimes the knee gives way, the foot turns in, and she falls, from the dislocation taking place on bending the knee, and the knee then bending under her, thus preventing her walking safely.

September 14.—Soap plaster on leather to be tightly applied round the knee, so as to strap the patella in position; over this a bandage from the foot to above the knee; a back-padded splint was next bandaged behind the knee, and she was kept in bed

October 4.—A dextrine splint applied thus:—Three pieces of card-board, the breadth of the hand, are dipped in cold water and moulded to the knee—one behind, the others one on either side—to extend from the middle of the thigh to the middle of the leg. A paste of dextrine is now applied on both sides of each piece, and on the side to be applied to the leg a layer of cotton wadding is laid: to the external surface the roller adheres, which is further smeared with the dextrine during its application: over the whole a dry bandage. (The cotton-wadding prevents such compression being made by the roller as would impede the circulation—a point of importance in applying this form of splint in recent fractures.) The splint was kept on, and she was able to walk. Discharged October 16.

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Medical Times and Gazette.

SATURDAY, DECEMBER 21.

DECEASE OF THE PRINCE CONSORT FROM TYPHOID FEVER.

WITHIN a very few hours after the issue of our last week's Number, in which we had furnished our readers with an authentic account of the Prince Consort's illness, it pleased the Almighty that the illness should prove fatal. Thus, in the very prime of manhood, in the midst of apparently flourishing health, and of every outward circumstance which could make his life happy for himself and most desired by others, was the Prince suddenly cut off. The great mass of the community were stupefied. It was not so much the sudden spectacle of the instability of all human grandeur, as the thought of the family whose exalted rank could not exempt them from the griefs of the fatherless and the widow. What will the Queen do? How can she bear so great a shock? were questions which brought tears to the eyes of many a strong man, and, as we can testify, disturbed the sleep and prostrated the spirits of many a weak and nervous invalid. Since the death of the Princess Charlotte, no grief so universal has filled the public thoughts. Thankful we are to be able to assure our readers that the fortitude and resignation, and that quiet courage which can find in duty the solace of grief, show our Queen to be in every respect worthy of her exalted position.

Cut off as the late Prince was from all active interference in political life and in warfare, he did his duty well in all the offices which he could legitimately fill. As a husband and father he was a model to the whole realm: no breath of scandal ever sullied his name. He gave his leisure to the cultivation of the arts and literature. He was the promoter of every attempt to develope the material resources of the country, to enlarge the mental capacity, and increase the comforts of the people, and thus to lay wider and deeper foundations for the prosperity of future generations. We gratefully record his promotion of art, science, and literature, and, as the highest eulogy we can bestow, hope that his sons will follow in his steps.

Our Medical readers doubtless suspected something serious when on Monday, the 9th, they saw the announcement that the Prince had been ill for a week "with a feverish cold and pains in the limbs, and that within the last two days the feverish symptoms had rather increased, and were likely to last some days longer." Our Medical friends began to whisper the ominous word *typhoid*, and their suspicions were realised when the first official bulletin appeared on Wednesday, the 11th, with the names of four Physicians attached to it. It stated that the Prince was suffering from "*fever*, unattended by unfavourable symptoms, but likely from its nature to continue for some time." The bulletin of the 12th announced that "His Royal Highness the Prince Consort has passed a quiet night. The symptoms have undergone little change." On the 13th matters looked more ominous, for the Royal patient had "passed a restless night, and the symptoms assumed an unfavourable character during the day." On the 14th, in the morning, it was announced that "His Royal Highness the Prince Consort has had a quieter night, and there is some mitigation of the severity of the symptoms." But the gleam of hope furnished by this amendment soon passed away. There were fluctuations from time to time, and even within an hour of his death the Prince expressed himself as strong enough to get out of bed; nevertheless, a

terrible fit of congestion of the lungs ensued, in which he expired, shortly before eleven at night.

The Prince's constitution was one of those which was not calculated to bear the brunt of an enfeebling zymotic disease. Spite of an active athletic life and of careful diet, he displayed an early tendency to increase of bulk which is rarely compatible with a healthy rigidity of fibre. He was easily depressed by a common cold or any other slight accidental illness, had a feeble circulation, and firmly believed that any severe illness would at any time be fatal to him. How and when he contracted his fatal illness is matter of conjecture purely. The succeeding article will show how impossible it is to lay the blame on the sanitary arrangements of Windsor. It is said that he had suffered from "cold," and had got wet through in shooting, and had exposed himself imprudently while seeing the Eton boys drilled. Nevertheless, "cold" does not create typhoid fever, though it may enhance the susceptibility to its influence. All maladies of this class have a "period of incubation." The fatal zymotic poison is imbibed, but it does not at once show its full effects. It broods for a certain number of days, like leaven, in the veins of the victim before there ensues that shivering fit, of greater or less intensity, which is the starting point of the actual fever. Some poisons, like the small pox, have fixed periods of incubation; others, as the scarlet fever, are uncertain, for there may be no interval whatever—the fever may begin immediately on the receipt of the poison. In the typhoid the period of incubation is probably about a week, and the source of the fatal poison must have been at some place which the Prince visited during the last week of November. Was it Cambridge? Was it South Kensington? It is vain to speculate. The causes of typhoid fever still abound even in places which ought to be the most exempt from them. Like poisons of their class, they evidently do not affect all alike, but only some persons who are predisposed, and no one who travels much can be sure that he may not meet with them.

As we said in our last Number, it is a fortunate thing that the Prince was attended by that estimable Physician who had most knowledge of the peculiarities of his constitution, assisted by one whose Professional "spurs" were (if we may be allowed to use the expression) won in the exploration of the particular disease which had to be combated in this instance. So soon as unfavourable symptoms manifested themselves, Sir James Clark and Dr. Jenner requested that the patient should have the benefit of additional advice, and that their own responsibility should be divided. This proposition was very unwillingly entertained at first by the Personage most nearly interested, partly from her unbounded confidence in her advisers, and partly from fear of still further depressing the vital powers of the Prince, and increasing his despondency by alarm at indications of increased danger. The repeated request of the Physicians, however, was at length complied with; and two Physicians were specially selected by the Royal Family—Sir Henry Holland and Dr. Watson: the former distinguished by his knowledge of the minutiæ of therapeutics and the peculiarities of aristocratic life, the latter for having enjoyed some of the largest fields of experience, and for the reputation of possessing a most mature and sober judgment and unimpeachable conscientiousness. The confidence which the Royal Family placed in their advisers is fully shared by the public and by the Profession. They may be sure that the most refined and energetic resources of medicine and diet were employed to save and sustain the patient's vital powers. After the fatal event, the Queen, with a calmness and dignity which never desert her, expressed her warmest thanks to Sir James Clark, as one of her oldest and best friends; and more than one member of the Royal Family testified to Dr. Jenner their gratitude for the attention which he had lavished—unavailingly, alas!—on their departed relative. We have these details from a patient, high in office, who received them from a member of the Royal Family.

It is beneath the dignity of a Medical Journalist to notice the absurd rumours which are forged and circulated by the idle and unprincipled—such, for instance, that the Prince was poisoned by a Russian spy! The symptoms of typhoid during fourteen days were unmistakeable; and we may now be permitted to give a short *resume* of the present state of our knowledge respecting that disease.

Throughout the whole range of Physic, there is no disease respecting which a more clear and decided advance has been made in our knowledge not only of symptoms and causes, but also of prevention and treatment, during the present generation.

Let us turn to the first edition of Dr. Watson's Lectures, published in 1843, and we there find that the inferences which this most able Physician had then drawn from the experience of ages and his own observations were, that "fever," or "continued fever" was essentially *one* disease,—that it might have *varieties*, or divers *forms*, but that these varieties ran into each other, and were not defined by any distinct line of demarcation, and might arise from the same contagion. He gives as the typical form of fever, that which is attended with hæmorrhage from the bowels, diarrhœa, and ulceration of the ileum; yet relates that in various epidemics the symptoms had varied, insomuch that the bowel affection was well-nigh absent in some of them. He describes the fever with diarrhœa as being most prevalent in the autumn. He believed that all fever arose from contagion, although it might be sometimes difficult to trace it; he did not believe that it could be *generated* by the crowding of human bodies together, nor yet by the effluvia of putrescent animal matters, nor yet by cold or starvation; although these might be powerfully predisposing causes. As to the treatment, the conclusions arrived at by Dr. Watson at that day, of the dangers of bleeding, and the benefits of wine and beef-tea, were anticipatory of the practice which is now generally adopted.

But almost immediately after this date, observers in various countries noticed that the symptoms and anatomical characters of fever varied, and varied essentially in different places. A writer in 1844 said that we might look in vain in this country for the Continental typhus with intestinal ulceration. Soon afterwards at the French Academy, a discussion, celebrated as a turning point in the history of Medicine, was held on the question, Whether, under the name "continued or typhus fever," two distinct diseases were not confounded, one to which it was proposed to appropriate the name "typhus," to the other "typhoid." It was affirmed by Louis, and others who maintained the diversity, that typhus was contagious, typhoid not so; that typhus attacked all ages, typhoid having a predilection for the ages from 15 to 40. This question was eagerly worked out by a number of competent observers in this country, amongst whom the names of A. P. Stewart and Sankey readily occur to us, and by Dr. Jenner, whose able summary of the subject, presented to the Royal Medico-Chirurgical Society on December 11, 1849, brought conviction to the minds of the great mass of the Profession in this country. Some there were to whom the evidence still did not appear conclusive; for instance, the late Dr. Todd, who in a conversation with the writer in 1852, expressed his doubts as to the validity of the essential distinction; yet since Dr. Jenner's paper, *his* doctrine of the essential diversity has been accepted and taught throughout the country. He showed that up to Withering's time scarlet fever and measles were considered as one disease, and that an extension of the analytic process which shows them to be distinct (much as they have in common), also shows the non-identity of the affections which had been described as continued fever. He showed that one species of continued fever, the *typhoid* was distinguished by

the presence of disease in the Peyerian glands of the small intestines; and by an eruption of *successive* scanty crops of rose-coloured spots on the trunk, each lasting about three days; whereas in *typhus*, there was an eruption of persistent dusky, non-papular spots, and the affection of the bowels was absent. Dr. Jenner shewed, from his experience at the Fever Hospital, that patients with typhoid, typhus, and the relapsing fevers, when these occurred at the same time in London, did not come from the same houses—that these fevers did not pass into each other—and that the causes were probably altogether distinct from each other.

Meanwhile, the sanitary reformers were actively at work, and proving beyond question that *fever*, generally, flourished in the presence of famine, filth, impure water, overcrowding, and want of ventilation. But it was reserved for Dr. Murchison to show definitively the exact relation which each of these causes bears to a specific form of fever. He divides fever into four classes, the *febricula*, occasioned by heat, fatigue, errors of diet, etc.; the *relapsing* fever, caused by famine; the *typhus*, caused by the combined influence of destitution and of the exhalations from human bodies crowded together; and the *typhoid* (or pythogenic, as he calls it), caused by putrid emanations, especially from sewers. The true typhus, and the relapsing fever, are those which arise after famine, and after protracted crowdings, as in the old-fashioned jails. The awfully contagious nature of the true typhus was exemplified by the recent importation of it into Liverpool, by the crew of an Egyptian frigate; it occurs at all seasons and all ages, and of course selects its victims from the lower classes of society.

Not so the typhoid. This is a disease of early adult life, *par excellence;* it is always most prevalent in autumn; it affects rich and poor; and seems to be more fatal to the rich. If evidence have any weight at all, this fever has been distinctly proved to be due to sewer poison. This was the kind of fever which, in 1848, broke out in the cloisters at Westminster, in houses which were proved to communicate with an old rotten sewer underneath; those houses which did not communicate with the sewer were spared. This was the fever which, in 1857, broke out in the National Hotel at Washington, which was exposed to the vapours of a foul sewer. This form of fever ravaged Windsor in the year 1858, producing thirty-four deaths in the town; besides that five persons died after removal to their own homes. The total number of cases which occurred in Windsor at that time is estimated at 440. We believe that the experience of most Medical Officers of Health leads to the conclusion that the origin of scarlet fever is closely allied with that of typhoid, although the scarlet, when once generated, spreads rapidly by contagion, whereas the typhoid, although it *may* be contagious in certain bad cases, is usually not so. It is also closely allied to the causes of diarrhœa. In the epidemic at Windsor in 1858, it was distinctly shown by Dr. Murchison, that the sewers had been imperfectly cleansed in consequence of the unusual drought, that the escape of sewer gases into the interior of respectable houses was easy, and that such escapes were complained of, and did exist. The worst houses with no sink or closet *within them* escaped. The Castle at that time was exempt from fever; the only place near it where fever prevailed being part of the Mews in which occurred thirty cases and three deaths. It was shown, that whereas the Castle, which was exempt, had a system of drains of its own, which were carefully flushed out every morning, the part of the Mews where fever prevailed was connected with the uncleansed town sewer, and that the arrangements in the inside of the residences in the Mews were such as to render the escape of sewer gases into them certain. The instances collected by Dr. Murchison prove beyond doubt that sewer poison can produce typhoid fever.

The moral is, that where typhoid fever prevails in a house, there it is certain that sewer gases, or some analogous putrescent vapours, find their way. It must be remembered that in modern houses, the access of these vapours is facilitated by every sink and aperture which leads to the drains, and that all the conveniences of modern civilization require the most vigilant care to hinder them from being dangerous nuisances. It may be extremely difficult to find the source of the sewer poison; nevertheless if one thing be absolutely true, we believe it to be, that *multiplied* cases of typhoid fever in any house prove the existence of sewer gases there.

This is well exemplified by a case related by Dr. Druitt in a lecture at the Royal Institution. In the autumn of 1856 two young persons were one after the other taken ill of typhoid fever in a house in one of the streets which lead from the Strand to the Thames. In the same house had been many cases of diarrhœa in 1854. The patients were removed to the suburbs, and recovered. Their father became ill in November, and, although he did not get Medical advice, was for more than a week excessively low, shivering, and ill. One morning, on getting out of bed, he felt as if shot, and died in a few hours. The body was examined by Mr. Henry Lee, who discovered ulceration and perforation of the ileum and enlargement of the adjoining glands—the pathognomonic appearances of typhoid. The house was examined, but in vain, for any defect in the sanitary arrangements. About two months after the burial of the poor man came a communication from the surveyor of St. Martin's parish to the effect that there was a large old forgotten sewer under the house, which received the drainage of two streets, and had been almost entirely bricked up when Hungerford Market was built, so that in reality the house stood over a putrid sewer containing the solid filth collected during thirty years.

In any case, then, the occurrence of typhoid fever renders imperative a thorough examination of the premises in which it has occurred. If there be but one case, that may have been contracted elsewhere; but the occurrence of two or three in the same house renders it nearly certain that some source of impurity lurks near the sleeping place of the person affected. We are sure that no precaution has been neglected in the case of persons so dear to the Nation as the Royal Family of England, as we trust the following article will prove to our readers.

DRAINAGE OF WINDSOR AND OF THE CASTLE.

The recollection of the epidemic of typhoid fever which occurred in Windsor in 1858, and which was attributed with good reason to the state of the town drainage, will no doubt have led many persons ere this to question whether the melancholy death of the Prince Consort may not possibly belong to the class of preventible calamities, and to reflect, with something akin to humiliation, on the readiness with which but a few short weeks ago we were offering advice on sanitary matters to the afflicted Royal family of Portugal. As everything bearing on this question is of universal interest at the present time, we thought it our duty to commission a competent member of our Profession—one, too, who is distinguished for his knowledge of architecture,—with suitable introductions, to Windsor. There, the means of making the most searching examination of the facts were at once placed at his disposal by the able and intelligent Clerk of the Works at Windsor Castle, and by the Registrar of Deaths, and other officials. The substance of his observations is embodied in the following description of the drainage systems of the town and Castle of Windsor. By this, aided by the accompanying map, for which we are indebted to Dr. Murchison, our readers will see that it is not possible to lay the blame of this great public calamity on the neglect of known and preventible causes of illness.

The able and complete reports of Mr. Simon, the late Mr. Austin, and Dr. Murchison, made after careful investiga-

tion, at the close of the year 1858, furnish us with an excellent description of the state of the drainage during that epidemic. That a change for the better has taken place since that time is sufficiently proved by the fact, that whereas between the first of August and the middle of December of that year 32 deaths from typhoid fever were registered in Windsor, in the same period of the present year but one from fever has occurred, and that in a particular spot to which we shall refer presently.

The town of Windsor, and a great part of the Home Park, are included in a large bend of the river Thames, the convexity of the bend being towards the north. Between the town and park stands the Castle, on an abrupt ridge of chalk, which rises suddenly from the clays around. It is precipitous on the north side, towards the river, but slopes more gradually down towards the south.

The main sewer of the town runs directly eastward from the junction of Sheet-street and Keppel-street to the river, into which it falls at a distance of about a mile from the town. It is thus easy to understand the complaints of the prevalence of foul smells in the town when the wind is in the east, *i.e.* when it blows into the mouth of the sewer. The

their way into the main sewer, their entry being connected with a flushing apparatus and tank, supplied by a muddy and scanty stream called the "Bourne ditch." All this system of sewerage was reported by Mr. Austin to be well constructed, and in good condition, except in a few particulars, one of which was ventilation. It is now apparently in perfectly good order, and has a sufficient stream of water running through its main trunks, but the ventilation must still be pronounced defective at several places, the worst being at the corner of Keppel-street. "Nothing was easier to see," writes Mr. Simon, in 1858, "that in Windsor generally there was extreme slovenliness as to the removal of filth." If the appearance now presented by the back parts of the town is any considerable improvement upon their state three years ago, then, indeed, must this reproach of Mr. Simon's have been well deserved.

The drainage of the Castle forms an entirely distinct system from that of the town, the Castle sewer joining the main tunnel in the Home Park, nearly at a right angle. (a) Into it are now drained the whole of the Royal Mews and the whole of the Castle, the western parts of each of which had, till the year of the epidemic, discharged into the town sewers.

A more elaborate set of drains than that by which the refuse of the Castle is collected into the outfall sewer probably does not exist. And the care with which the daily cleansing of the whole system is carried out is quite as remarkable as the completeness of the system itself. An ample supply of water for flushing is procured from the Castle water-works, near the river, by means of which a large and sudden rush of water is sent down the drains every morning from tanks in the Castle and the fountain-basin in the garden; besides which, an apparatus is provided for flushing all the smaller

(a) See the point *a* in the map.

drain-pipes, and used daily; and the overflow of cisterns causes a constant stream through the sewers, both day and night. Moreover, the branch drains are all trapped at their outfall into the shafts to which they converge, as well as at their commencement, and are furnished with ventilating-pipes opening above the roof, to avoid the risk of the return of gases to which the highest point of a sewerage system is always liable. An examination of one of these pipes is enough to prove that it performs its duty; while a careful testing of the air at the various shafts and man-holes must convince the observer that little or no sewer gas really does find its way up the hill from the main tunnel. Gas does escape from many of the shafts into which the smaller drains discharge themselves to join the main drains, but not in greater quantity than might be reasonably expected from an establishment of such magnitude.

The construction and arrangement of the basement story of the Castle is so extremely complex and inconvenient, that the proper ventilation of many of the sinks, closets, etc., in that part is a matter of some difficulty, and occasional stenches are certainly perceived; but the only palpable failure in the Castle drainage is at the south-west angle of the lower ward, where an old drain which led from the guard-room and its neighbourhood into the town sewers has been found to have been clogged for a considerable time. Workmen are now engaged in clearing out and removing the obstructed drain, with the intention of making a new one, which is to lead from the town sewer to the new guard-room in course of erection in the quadrangle. It has been found necessary to sink a shaft to a considerable depth, in order to reach the point of junction, and several trenches had to be dug before the course of the old drain could be discovered. There is no communication, however, between this faulty spot and the general drainage of the Castle; and though an explanation of the failure is necessary in order to guard against misapprehension, there need be no fear that any contamination of the atmosphere of the Royal apartments, which are separated from it by the entire length of the Castle, could possibly be derived from this source.

An attentive examination or the corridors, passages, sinks, closets, etc., in almost every part of the immense building fails to furnish any evidence whatever of the reflux of gases from the sewers. There are many closets and other places in which thorough ventilation could only be effected by the means used in a coal-mine. These are evils which no system of trapping can possibly avoid. The closeness observable in many of the passages, especially in the lower part of the east side of the Castle, is fully accounted for by their small size, scanty light, and insufficient circulation of air; disadvantages sometimes aggravated by the carelessness of servants, an instance of which came under notice no more than three weeks ago. But there is no reason to suspect any escape of gas from the main sewer, which tunnels through the hill at a great depth below the Castle quadrangle, and even at the point where it emerges on the slope below the south terrace, eastward of King George the Fourth's Gate-way, is many feet below the surface. The system by which escape from the branch drains is prevented has been already described. To sum up our account of the Castle sewerage, we know no place where a more complete or more carefully worked system is to be found, nor one which, considering the difficulties of the position, is more thoroughly successful. Gases undoubtedly do escape when the sewers are opened, but in such very small quantity as to prove both the extreme cleanliness of the sewers themselves, and the absence of any ascending current of importance in them.

Our conclusion therefore is, that unless some dire and unsuspected source of danger should lurk in the Royal apartments themselves—ample and well-ventilated as they apparently are—the sewerage system of the Castle must be acquitted of all share in the mischief, and the causes of the National calamity which we all deplore must be looked for elsewhere.

THE WEEK.

In our Number for September 14 we gave a pretty full account of a case of suspected poisoning at Coventry. A weaver, named Beamish, was proved to have been too intimate with a young workwoman, and therefore possibly to have had a motive for wishing to get rid of his wife. He was proved, at least, to have inquired for arsenic at a chemist's about the 14th of August, and to have purchased some at another chemist's on the 17th. His purchase was distinctly proved by the entry in the chemist's sale book, attested by Beamish's own signature. His alleged object was to poison rats, but no rats were proved to have existed. The wife and three children were taken ill on Wednesday, the 14th, after breakfast, at which the prisoner was not present. The youngest child died the next day, and the mother on the 20th. She was proved to have been sick several times after tea administered by the prisoner, and not after food and medicine given by other persons. She was proved to have expressed herself on her death-bed with religious feeling, and to have shown no propensity to suicide. Nevertheless, after her death the prisoner produced a note, alleged to have been written by the unfortunate woman, and confessing that she had poisoned herself. That note was shown to have been written by the prisoner. Arsenic was found in the stomach and blood of the deceased. From this chain of evidence the jury found a verdict of *Guilty*. We again call attention to the necessity of investigating the presence or otherwise of poison in any case in which sudden vomiting and purging occur to more than one person after partaking of food together. Also that it is better in any case to withhold a certificate of death than to give one without knowledge of the facts.

On Thursday, the 12th inst., a large and influential public meeting was held at Winchester, to consider the propriety of effecting the thorough drainage of the town. It was attended by the Mayor, the chief clergy of the Cathedral and College, by Drs. Crawford and Heale representing the Medical Profession, and by the leading inhabitants. The meeting, however, was speedily routed by an irruption of the lower order of ratepayers, headed by some public-house demagogues, who clamour against all improvement, and prefer that the poor should die of fever rather than themselves be taxed for cleanliness. So, in order to prevent a breach of the peace, the meeting was dissolved, and many respectable persons adjourned to a room at an hotel, where they might pursue their discussion unmolested. Mr. Rawlinson, C.E., then gave an account of the *cost*, per head per annum of the population, of effective sewerage, in various towns in which it had been carried out, which varies from 6d. to 13d. He thus described the proposed outlet works:—

"The site for the outlet was fixed at a sufficient distance, if possible. The area of land that they would use would be about two or three times the size of that room, five or six trenches would be constructed, and the sewage runs into those; they are constructed so that they can be dammed by hurdles, and all the flocculent matter stopped and strained away; the run was diminished till, at the further end, it was only three feet in a second; in a very short time it had parted with the solid matters, and the fluid portion, which was in appearance quite clear, was allowed to run away into the river. It must be remembered that the sewage arrives comparatively fresh and innocuous, and that excreta from any part of the city would within one hour be deposited in that tank. In summer a little chalk lime was sprinkled over the matters left behind; that was found to be sufficient to fix the

ammonia, and to prevent any nuisance. The whole expense of these works at Worksop was only £250."

Considering, as we have before said, that the lower part of the town is quite undrained, that a large cesspool exists in the Hospital garden, and that the drainage of the barracks now runs in a sluggish stream under the very walls of the College, close to the *Sick House*, in which, as we are informed, more than one scholar has been laid up with typhoid, and one has died, we hope that the common-sense of the citizens of Winchester will prevail, and that their city will be added to the list of those which have the blessings of pure air and water.

The Council of the College of Surgeons has at last executed the power entrusted to them by law of striking off from the list persons who have disgraced their fellow Members. The names of the following convicted criminals have been expunged:—John Nichol Watters, tried at the Central Criminal Court, Old Bailey, and sentenced to eighteen months' imprisonment, with hard labour, for conspiracy to defraud; David Griffiths Jones, now undergoing one year's imprisonment in the House of Correction, with hard labour, for wilful and corrupt perjury; and Daniel de la Cherois Gourley, imprisoned for six months for breach of trust. We trust that now the Council have made a beginning—late in the day though it be—they will relieve their Members from the disgrace they now labour under of appearing in the same list, and coming before the public under the same Collegiate designation, as the villainous authors of the filthy books which still deface the advertising sheets of some otherwise respectable newspapers.

The same battle is being fought at Keswick as at Winchester. There are some persons who still cling to cesspools and filth; who love the water from town wells, dug in close proximity to everything disgusting. Mr. David Lietch, in an admirable address to the inhabitants, thus treats of a fever which has lately prevailed in the town:—

"It would be difficult to find in the whole history of fever any which is more clearly traceable to defective drainage than the fever which has been hanging about Keswick since May last.

"It has not been propagated by great heat or cold, for the temperature has been moderate;—nor by squalor and want, for with very few exceptions, the persons attacked have been accustomed to good and abundant food; nor by bad water,—one of the most effectual means for the spread of fever;—nor by any special endemic influence,—any poisonous exhalation, from the whole of the site of the town,—for there is no fever in those parts of it where the drainage is good and the air uncontaminated; not always, nor often, from small and badly constructed houses, for the lane in which the disease first arose and spread most virulently, consists mainly of houses with good rooms well supplied with air and light. From beginning to end the fever associated itself with that form of defective drainage which keeps the discharges from the human body in the immediate vicinity of human dwellings. It originated in one of the best lanes in the town, to look at,—but the house itself in which the first case occurred was wretched, the little patient was puny and predisposed; the lane was, before it came into the present owner's possession, notoriously one of the filthiest in the town,—the drainless soil saturated with the filth of a century,—and it is more deficient in the means of getting quit of the fever discharges than any other place in the district. In this lane there were thirteen cases of fever, and from it went two of the thirteen to form a new colony in the northern part of the town, which had hitherto been free from the epidemic. There, as was to be expected, it has spread, first in the house to all the members of the family, and now to the neighbourhood. The same causes which spread it in the first lane, though far less in degree in the northern part of the town, are spreading it there, and unless care is taken by thorough surface cleansing, disinfection, and lime washing of houses, it is very probable that it will creep about all the infected parts of the town for some time to come.

"Over one cesspool in a good house there have been six cases of fever and two deaths; over another, in the next lane, there have been five more, with seven cases between these two poison pits, which are within forty yards of each other. I refrain from going further into detail on this disagreeable subject; but I pledge myself to prove before any Medical Inspector of the Privy Council or jury of intelligent Medical men, that the typhoid fever now in Keswick is the night soil fever, and results mainly from defective drainage. Now, the owners and tenants of the property are not to be blamed for this. It is, in one word, IMPOSSIBLE that they can keep the foul air which spreads the fever poison out of their houses until the main drainage is effected, and a thorough system of house drainage is established in connection with it. But the people of the town of Keswick are not the only persons concerned. The inhabitants of the surrounding districts, too, suffer from the epidemics of the town; and have not the 20,000 tourists who visit Keswick every year some right to look to the authorities for immunity from preventible diseases?

"Are the members of this Local Board, or the majority of them (for it is well known that some of them would gladly see sound sanitary measures adopted), to go on striking at the prosperity of the town, as they are and have been doing for nine years past!"

In the present day the reputation of a watering place or summer resort will very soon show itself to be a breeches' pocket question. Brighton and other ill-drained towns already suffer, and deservedly so; and ere long we shall have Paterfamilias inquiring of the *death rate* of a place, and the causes of mortality, ere he migrates thither with his family for their autumnal holiday.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

SALUBRITY OF FRENCH AND ENGLISH HOSPITALS.

DURING the recent discussion on M. Lefort's Paper on Excision of the Hip-joint at the Academy of Medicine, MM. Gosselin and Malgaigne had made some observations contrasting unfavourably the hygienic conditions of the French with the English Hospitals, as shown by the greater mortality following operations observed in the former. M. Davenne, Honorary Director of the Public Assistance for Paris, and a Member of the Academy, repelled these charges, demonstrating by official figures that both the mortality and the length of residence in the Hospitals had continued to diminish from the beginning of the century to our own time—a fact which, indeed, was not doubted, but one beside the question. He added that the condition of the Paris and London Hospitals could not be justly brought into comparison, owing to the difference of their organization—one capital difference being, that the pauper population supported by the poor-law rates is not admitted into the London Hospitals at all, but into the Infirmaries of the Workhouses. With respect to the dissemination of the Hospitals far from the centre of Paris, in the pure air of the country, which has been proposed as a matter of salubrity, he does not think anyone would venture to start a measure which, to say nothing of the difficulties of execution, would entirely disturb the habits of the Parisian population, and bring desolation into the midst of many an unfortunate family. We must never forget that time is the fortune of the poor workman; and we should be careful not to place him in the sad alternative of losing a day's work in order that he might carry consolation to any relatives lying sick in an Hospital, or of abandoning them in their isolated state, amidst all the additional suffering which the anxieties due to the absence from home may add to that contingent upon their maladies. It is not a question of mere humanity, but also of that respect to the sentiment and ties of family and the principles of a high morality, which should act as a rule for the guidance of a properly-conducted administration. M. Bouvier also maintained that the London Infirmaries, not the Hospitals, are the true analogues of the French Hospitals, and are very inferior to these in every respect. M. Malgaigne

observed that the patients admitted into the English Hospitals were more seriously affected than the French patients, because the English Surgeons, being paid for their Clinical Lectures, only received the more interesting, *i. e.* the severest cases, rejecting the slighter ones, which, admitted into the French Hospitals, reduce their proportionate mortality. Taking the Hospitals which are the most comparable in London and Paris, M. Malgaig e states, that of 100 persons operated upon, 56 die in Paris, and 30 in London. Taking operations for pathological causes, as amputation of the thigh, *e. g.*, there are 60 per cent. deaths in Paris, 21 in London, and 19 in Massachusetts. The reason of these differences is not to be found only in the relative insalubrity of the towns in question; but while in London the wards have but twelve beds, in some of those of Paris they have eighty—the air in the morning being quite poisonous. M. Bounafont stated that having quite recently returned from visiting the principal Hospitals in Belgium, Holland, England, and Germany, he was enabled to assert, that, as regards salubritv, internal management, furniture, sleeping arrangements, etc., a very small number of foreign Hospitals surpassed the French, while the great bulk of them were far inferior, although situated in towns of the first order. Still, he has been much astonished at seeing important operations performed with complete success in several of these Hospitals, which have not yet obtained access to the domain of French Surgery. Thus at Edinburgh, Munich and Berlin, numbers of resections were practised with success; and that in Hospitals in which the ventilation and internal arrangements were far from presenting such favourable hygienic conditions as most of the French Hospitals, and especially the Lariboisière. Upon what does this great relative success then depend? There is certainly some point as yet unknown well deserving of investigation; and it is surely not the skill or knowledge of the French Surgeons which can be called into question. M. Bounafont thinks that much may be due to the very simple mode of dressing observed in almost all the Hospitals he visited, consisting in the mere application of cold water.—*L' Union Médicale*, No. 148.

EXCERPTA MINORA.

On Anæsthetics in Midwifery Practice.—Prof. Barker terminates an elaborate paper upon this subject, read before the New York Academy of Medicine (founded upon 786 cases, 759 treated with chloroform, and 27 with ether), with the following conclusions:—1. Anæsthetic aid is of the greatest value in the obstetric art, and chloroform is generally the preferable agent for this purpose. 2. It exerts no injurious effect when properly administered, either upon the health of mother or child. 3. It is perfectly justifiable to use chloroform in natural labour, solely for the purpose of relieving pain. 4. It is especially useful in calming the extreme agitation and mental excitement which labour often produces in very nervous women. 5. It should be administered in those cases of natural labour where the progress is suspended or much retarded by the pain occasioned by previous diseases or such as may supervene during labour, and in those cases wherein the irregular and partial contractions occasion intense and almost constant pain, but have no effect in advancing labour. 6. It is of great service in spasmodic contraction and rigidity of the cervix uteri, in tetanic rigidity of the perinæum, in certain forms of puerperal convulsions, and in the various obstetrical operations.—*American Medical Times*, No. 22.

Temporary Diabetes in Anthrax.—M. Vulpian relates a case of this description in addition to those which have been published by Prout, Wagner, and others. The patient, seventy-three years of age, previously in excellent health and strong constitution and a moderate liver, became the subject of hemiplegia in March, 1861. Towards the end of July, when the paralysis had been for some time diminishing, he became the subject of anthrax in the lumbar region. This became of considerable size and was long in sloughing out after incision. During the period of sphacelation of the cellular tissue a considerable quantity of sugar was found in the urine, and continued to be present as long as this process went on, disappearing when the process of mortification had terminated. The hemiplegia still persisted, the patient otherwise completely recovering his health.—*Gazette Hebdomadaire*, No. 49.

Remedy for Hydrophobia employed at Salamis.—Dr. Landerer, of Athens, gives the composition of the remedies for hydrophobia employed by the monks of the Island of Salamis, its success being apparently considerable enough to deserve attention. It consists of a powder formed of two parts of *Cynanchum erectum* or *Marsdenia erecta* and one part of *Mylabris variegata*, apparently the *cantharis* of Hippocrates. A plug of sheep's wool is firmly thrust into the wound and burnt *in situ*, a large eschar and suppuration resulting. The discharge is kept up for thirty or forty days, or even a longer period by means of an ointment of turpentine and mastix. The powder is given internally, and after a few doses bloody urine results, which is regarded as a sign of its efficacy.—*Buchner's Repertorium*, 1861, No. 7.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

GERMANY.

Berlin, November 7.

THE CLINIQUES OF THE UNIVERSITIES.

A short account of the Cliniques of some of our celebrated Professors, and their mode of clinical instruction, will probably be of interest, as it is very different from the method followed in England. The Director of the first Medical Clinique, and successor of Schönlein, is Professor Frerichs, well known for his physiological and pathological researches, and whose reputation was established by his work on Bright's disease, in which he propounded the theory that the uræmic symptoms which accompany that disorder were due to a decomposition of urea into carbonate of ammonia, which was brought about by a ferment as yet unknown. This hypothesis has found much contradiction, but it is even now received as satisfactory by nearly all the most eminent clinical Professors. More recently M. Frerichs has published a work on the Diseases of the Liver, which is well known to you, and which forms the commencement of a handbook destined to embrace the whole practice of Medicine.

M. Frerichs' Clinique is held daily in the Charité Hospital, from 11 a.m. till 12½ p.m., in a room especially selected for the purpose, which adjoins the wards of the sick, and affords ample space for more than 100 students. Patients who are to be examined are introduced there, and the students have thus the advantage of being able to see the patient and to follow the clinical examination, which would be impossible for all of them if the clinique were held in the wards themselves; while the patients, on the other hand, are not disturbed by the presence of a large number of persons, and the air of the wards is prevented from becoming insalubrious. Every student has in turn a patient handed over to him, and to make an examination, which is afterwards completed by the Professor, who gives, in a short and concise manner, an account of the peculiarities of the case, interweaving other suitable remarks of practical purport. The symptoms, prognosis, and treatment, are always most largely dwelt upon, and the patient is not merely introduced (as is the case elsewhere) in order to afford an opportunity for the discussion of certain scientific questions which may happen to be of interest to the Professor. The cases are always well selected, and not only such are introduced in which a diagnosis is comparatively easy, and whereby the students may become flimsy, but also such of an obscure and doubtful nature, which we can only hope to unravel by careful observation of the whole course of the disease. Specimens from the Museum of Pathological Anatomy, which illustrate the disease under consideration, are at the same time handed round, and microscopic preparations are also put up, in order to give the students an insight into the minute changes of structure which take place in the human body.

Professor Traube's Clinique is also held in the Charité. This gentleman has especially investigated the connexion which exists between certain vital phenomena in health and disease, and mechanical and physical laws. He was the first to prove that, contrary to the neuro-pathological views previously entertained, lobular pneumonia which is observed after a section of the vagi, is not the consequence of an alteration in the nervous influence, but is caused by the contents of the cavity of the mouth and pharynx penetrating into the ramifications of the bronchi, and there producing irritation. His researches

on the changes of temperature in cases of fever have led him to confirm the old theory of crises and critical days, which had very nearly been forgotten; and more recently he has dwelt much upon the connexion which exists between diseases of the heart and of the kidneys. On the whole, M. Traube adheres to the doctrines first enunciated by Professor Skoda, of Vienna, but does not follow him so far as to reject altogether all former experience, and especially therapeutics. Skoda was the first to disprove the theory of Laennec, that there were specific phenomena of auscultation and percussion for all diseases, and for every stage of a disease; he showed the physical conditions for the origin of such phenomena, which were to be observed in one disease as well as in another; and he created, in opposition to the empirical statements of Laennec, a rational basis for the phenomena observed in the physical examination of the chest. If we except the researches of Wintrich, Schweigger, and Körner, on the tympanitic sound, nothing new has as yet been added to the doctrines of Professor Skoda, which have been laid down in his Treatise on Auscultation and Percussion (ably translated into English by Dr. Markham). It is only his views on the causes of the sounds of the heart, and his theory that two sounds are formed in each valve, which have not been received by the Medical Profession in Germany. On these points we may perhaps, shortly expect some elucidation from Professor Traube, who has given special attention to the physiological and pathological relations of the heart.

The following points are much insisted upon by Professor Traube, concerning diseases of the heart:—Changes of structure which take place in this organ and exert influence upon its function either diminish or increase the work assigned to the heart in the system. It is *diminished* by an augmentation of resistance offered to the current of blood in its passage through the heart; for instance, if the pericardium is distended by fluid, and presses upon the heart; or in stenosis of the orifices, also if a wrong direction is imparted to the blood, as in insufficiency, or if the impulsive power of the heart is directly diminished, as is the case if this organ grows together with the pericardium, and if fatty or cellular degeneration of its muscular substance takes place. The work of the heart is *increased*, and the dangerous effects of the changes just mentioned, compensated, if there is hypertrophy and dilatation.

The first-mentioned changes diminish the tension of the aortic system, that is, the pressure of the walls of the arteries upon the blood they contain; while at the same time they tend to augment the tension of the venous system above the normal average. In order to arrive at a clear understanding of these relations, it is best to imagine that the change originates at the end of the diastole, that is, at a time when the tension of the aortic system is at its minimum. This must be increased by the next systole; but in consequence of the structural changes which have taken place, the quantity of blood propelled is insufficient to compensate for the loss which the aortic system has suffered. The medium tension is, therefore, during the next moment, less considerable than it was in the preceding one, and will remain so unless some compensation should be offered, by which the heart may acquire new force. A certain quantity of blood is therefore lost by the aortic system and lodged elsewhere. If there is exudation in the pericardium, this as well as the heart, must contain less blood than usual; and the fact that in cases of this kind considerable swellings of those veins which are visible on the surface, and also cyanosis, are observed, leads us to suppose that the veins contain the surplus. Stenosis and insufficiency generally cause dilatation of one or several cavities of the heart; and if this is grown together with the pericardium, both ventricles generally become dilated in consequence. If a considerable part of the substance of the left ventricle has been metamorphosed into connective tissue, the right ventricle becomes dilated. If in such a case there is a considerable swelling of the veins during life, dilatation of one or several cavities of the heart is sure to reveal itself by the post-mortem examination; although it may exist when no such swelling has been observed. The additional quantity of blood contained in the veins in such cases, will be the greater, the more the tension of the aortic system has been diminished, or in other words, the smaller the quantity of blood contained in the arteries.

Besides dilatation of the cavities of the heart, hypertrophy of its substance is also the consequence of certain structural changes in it. This latter explains why many patients affected with diseases of the heart, may for years suffer only in a trifling degree, as hypertrophy compensates for dilatation. If there is a stenosis of the mitral valve, the left ventricle receives, during diastole, less blood than in its normal condition, and cannot, therefore, propel so much blood into the aortic system as is required for sustaining its tension at its normal height. This may be obviated, if while the duration of the diastole of the ventricles remains unchanged, the velocity of those parts of the blood which have to pass through the stenosed ostium becomes as many times greater as the area of the ostium has become smaller. During the first and greater part of the diastole, the velocity of these parts of the blood depends upon the tension of the elastic tubes by which a communication is kept up between the left and right ventricles; but at the end of the diastole it depends upon the acceleration, which may be imparted to the contents in motion, by the left atrium. If the muscular substance of the right ventricle is hypertrophied, it is able to do more work than usual, and to augment the tension. If this hypertrophy of the left atrium and the right ventricle has attained a suitable degree, the left ventricle may, in spite of the stenosis of its ostium, receive as much blood as it does under ordinary circumstances.

In insufficiency of the aortic valves, the tension of the arteries is diminished by part of the blood, which had been propelled into the aorta, streaming back into the left ventricle when this relaxes. This difficulty may be obviated by hypertrophy of the left ventricle, so that a suitable surplus of blood is propelled by it into the aortic system. A complete compensation of this kind is more easily effected in insufficiency of the aortic valves, than in stenosis of the mitral valve; and in patients affected with the former the medium duration of life is greater than in such suffering from the latter. There are, however, also cases in which no compensation, or an insufficient one, is established. A complete compensation, even if it should exist at one period of the disorder, is, however, seldom permanent, as at a later time the valvular disease generally makes further progress, or the muscular substance of the heart undergoes fatty metamorphosis, or infarctus of the lungs is formed.

SWITZERLAND.

Zurich, November 8.

TYPHUS FEVER.

Professor Griesinger, who is Director of the Medical Clinique of this University, has recently observed a rather considerable number of cases of typhus, and gives the following differential diagnosis between this disease and typhoid fever. In the former the exanthema appears much earlier than in the latter, and is generally much more extensive. Thousands of red spots are, in certain cases, seen to cover the trunk and the extremities, especially the forearms and the thighs; in a few cases spots are also observable on the face, and they sometimes flow together, which is never observed in typhoid fever. In the latter the spots, which are at first of a bright red, become pale and disappear after four or five days; while in the former they become dark, livid, and of a dirty colour on the third day, and they do not then disappear, but a slight hæmorrhage takes place in them, whereby they appear petechial. These remains are generally visible for from ten to fourteen days, even after the febrile symptoms have entirely disappeared, which is scarcely ever observed in typhoid fever.

The whole course of typhus is also very peculiar. While in typhoid fever an increased temperature in the morning may be generally observed for three weeks, the morbid heat in typhus diminishes suddenly and without interruption within two days; just as in pneumonia, erysipelas of the face, etc. In typhus the patients complain of violent pain in the limbs, especially in the calves, which persists during the whole stage of acme; and even after all febrile symptoms are gone, the tongue sometimes remains dry and swollen. The convalescence is generally very slow and protracted, and in some patients an extraordinary emaciation results. The mortality in the cases observed by Professor Griesinger was small, as of sixteen only one died. In two cases typhus appeared immediately after typhoid fever, so that there can be no doubt about the existence of two different contagia.

LIVERPOOL.

December 17.

Since the date of my last letter there has been here a very marked increase in the amount of disease prevailing, and although Dr. Duncan's last report showed a mortality decidedly under that of the corresponding period of past years, I feel no doubt that the quantity of illness existing, especially from complaints of the zymotic class, is large. I hear from most Medical men whom I ask that they have some cases of fever under their care. There is, and has been, a great deal of catarrh, accompanied with great depression, and there has been some instances of a regular "influenza" invading families and affecting every member of them. I have heard of some cases of genuine diphtheria, as well as of other forms of sore throat.

The amount of small pox is very low. At the Parish Fever Hospital there are thirty-three fever cases, but not one of variola; and at the Western Institution for Infectious Diseases there is only one case of this disease.

There appears to be a tendency to erysipelas. In two cases of the idiopathic form of this disease now under my notice there has been this peculiarity, that, although in both there existed ulcerated surfaces before the attack occurred, one patient having syphilitic sore throat, the other a large ulcer of the leg, yet in neither did the disease attack the ulcerated surface or its immediate vicinity, but in each commenced on the face. Both are doing well, and it seems as if the previously diseased surfaces will remain exempt from the erysipelas.

I deeply regret to have to record the death, from typhus, of Dr. J. G. Sandie. He had returned from Australia a little more than a year since. He was apparently in the most vigorous health up to about a fortnight before his death. He caught what he thought a cold; then symptoms of typhus developed themselves, apparently in a favourable form; then came sudden prostration and death. His premature death—for he was only 39 years of age—has caused much grief, for he was deservedly respected by his Professional brethren. Those who knew him as I did must feel that they have lost a friend whom they esteemed and trusted, and that the town has lost an able, hard-working, and conscientious Physician.

One of the fever cases which have come under my own observation seems to me worthy of notice, as showing how the same set of unhealthy conditions does, apparently, develope widely different forms of disease. A family, previously healthy, move into a damp, ill-drained house, with a pig-stye attached. An immediate deterioration of the general health of the family results. One child has whooping cough, and then dies of "inflammation"—I suppose pneumonia followed it—another has rheumatic fever, and then the father has a bad attack of typhus, from which he is now recovering.

The Winter Assizes are now proceeding, and some matters in connexion with them may be of interest to your readers. The man whose case I mentioned in my last letter as being committed for trial for manslaughter by the administration of opium, was convicted and sentenced to a week's imprisonment; and seeing that sentences date from the commencement of the Assizes, and that more than that time had elapsed, he was discharged forthwith. Captain Wilson, of the *Severn*, to whose case I referred some months since as one of those instances of cruelty at sea, the effects of which one witnesses only too often in the Hospitals here, was also convicted on the first of three charges of manslaughter made against him, and is sentenced to twenty years of penal servitude. In the case of a woman named Nancy Armfield, tried last week for the murder of a poor little blind illegitimate baby by drowning, the jury adopted a somewhat remarkable course. The prisoner's counsel had attempted to prove that death could not have resulted from the alleged cause, since the child's tongue was found applied to the roof of the mouth instead of protruding, and the eyes closed instead of open. The jury had retired for some time, when they returned to the court saying that they were not satisfied that the Medical evidence established the fact that death had resulted from drowning, and inquired whether the failure of proof of this would invalidate the indictment. The judge directed them that they must either acquit the woman or convict her of having killed her child by drowning; and eventually they agreed on a verdict to this effect, recommending the prisoner to mercy at the same time.

A case of concealment of birth, which occurred last week, is so singular, that I give you the details; though I almost fear that I may be occupying too much of your space with medico-legal cases. A woman who had been for some time in the pregnant women's department of the Workhouse, was admitted into the lying-in ward of the same establishment about ten p.m. on Monday, December 2. The next morning, about eight o'clock, she was delivered—not of a child, but of a placenta only. She had said nothing on her admission to lead to the supposition of her having been delivered, and when asked what had become of the child, said that she did not know—that "her waters had broken in the water-closet," but that she had no idea of anything more having happened. The placenta appeared fresh. The cord had been torn near its fœtal extremity. The body of the child was found in the pipe communicating with the water-closet in which the woman had been, its progress having been arrested by some obstruction in the pipe just before its opening into the main sewer. The body was that of a child at about the end of the eighth month, and presented no marks of violence. It retained about an inch of the cord at the umbilicus. The abdomen and scrotum were discoloured and the cuticle peeling off. In order to gain the position in which it was found, the body must have passed through an S-shaped curve in the pipe just after leaving the pan in the water-closet. It appeared doubtful at first whether the child's head could have passed into the pipe without having been designedly pushed through; but on allowing the body to fall suddenly from about two feet above the level of the seat, it was found to pass without additional force, and when once fairly in the pipe the force of the water, which comes in a flush regularly every ten minutes, would be sufficient to carry the body over the curves of the pipe, and when once past them, there was nothing to hinder its progress. A post-mortem examination proved that no respiration had taken place. The question as to whether the child died in utero was difficult to settle positively, since about thirty-six hours had elapsed between the birth of the child and the finding of the body, during which it had lain in circumstances very likely to favour putrefaction. An inquest was held and a verdict of still-birth recorded; but the woman was, however, brought before the stipendiary magistrate on a charge of concealment of birth, and, after an investigation she was discharged. It does certainly seem strange that a woman should be delivered and not feel sufficient difference in herself afterwards to lead her to make any remark respecting her condition, but as this was the only suspicious circumstance about the case, her discharge was, I think, only just. I should perhaps say that she has had one child before, which is, I believe, now living, and that her labour was then very rapid.

At the Medical Society, on November 28, an interesting discussion arose as to the value of the galvanic current as an anæsthetic in the extraction of teeth. Several members had accompanied patients who had undergone extractions with very little if any suffering. In some cases, however, especially where there was any suppuration about the fangs, the pain did not seem influenced by the galvanism. Some present were able to speak from personal experience as to the comparative amount of pain in the extraction with and without it, and they spoke most decidedly as to the diminution of the pain. One gentleman, especially, stated that there was scarcely any perceptible sensation in the mouth, and that he seemed to feel the wrench of the forceps most in his hands, with which he was holding the arms of the chair in which he sat, and which contained the conductors of the battery. At the meeting on December 12, Mr. Hakes presented a specimen of urine, containing some insects in the pupa state, which a man alleged he passed from his bladder. They were about a line and a-half in length, about a third of that in breadth. Dr. Collingwood, who had carefully examined them, stated that they belonged to the order Thysanoptera, genus Thrips, species uncertain. He noticed that in Hill's "Decade of Curious Insects" (1773) an insect is described under the name of Alucita pallida—which is evidently a species of Thrips—of which great numbers are asserted to have been discharged by "a studious gentleman, very subject to the headache," while sneezing. The perfect insect has four wings, and several species of it are very injurious

to wheat and olives. The insects were alive when brought to Mr. Hakes, and lived some time. There seemed no possible cause for the man attempting an imposition. It appears difficult to ascertain how the man should obtain the insects; and it is to be hoped that further investigation may throw some light upon the case. In connexion with this subject, Mr. Hyginson mentioned that he had attended a lady who passed urine containing a very marked deposit, which, on examination, turned out to be common starch, and that remarkably enough, even when he drew off the urine with the catheter into a perfectly clean bottle, the starch was present. He had no doubt that she had mixed the starch with water, and injected if into her bladder. The finding of a syringe in the room corroborated this view.

At the same meeting a specimen of cod liver oil jelly was shown by Mr. Bailey, and tasted by some of the members. It is made by stirring the oil for a long time—three hours had been consumed in the preparation of that exhibited—with a solution of gelatine made as if for ordinary jelly. It may be flavoured in any way, and, as it forms quite a firm jelly, may be swallowed as a solid, and thus the taste may be almost imperceptible.

At the Chemists' Association, a short time since, a plan was suggested for distinguishing bottles holding poisonous lotions, etc., from medicine bottles, which is so simple and cheap that it is well worth noting. It was proposed that all such bottles should have corks with a flat wooden top, which, instead of being circular, should have fine semi-circular portions cut out of it, thus leaving fine points, so that it would be impossible to take the cork out, even in the dark, without being reminded by the feeling, if not by the look of the cork, of the nature of the contents of the bottle.

I fear I am making this letter rather long, but I must just mention one case before I close—an instance of the difficulty which there may be in ascertaining the presence of a foreign body in the pharynx. A child, aged five and a-half years, went to bed last Monday fortnight with a halfpenny in his hand. He awoke in the night apparently choking, and the halfpenny was missing. A man who slept in the room put his finger down the child's throat, and fancied he felt something; but the child bit him so severely that he was only too glad to get his finger out as quickly as possible. The child was seen by two or three Medical men. He had emetics administered; a probang with an almond-shaped mass of lead at the extremity had been passed the whole length of the œsophagus, when on the Friday following Mr. Bickersteth saw the case. The child could swallow liquids but not solids, and complained of pain at the back of the neck in swallowing. The finger passed very deeply into the pharynx just touched something which lay below the level of the larynx. A curved pair of forceps was introduced, and the coin was seized and extracted. It had lain with its surfaces looking forwards and backwards, and its edges upwards and downwards.

P.S.—December 18.—I find to-day that one statement I made in the letter I sent yesterday requires to be corrected. I said there was one case of small-pox at the Everton Institution. It was sent in as such yesterday; but I find to-day that it is nothing more than a very severe case of measles. It is a remarkable fact that in so large a place as this there should not be a single case of small-pox in any of the Institutions for the reception of the sick.

I should like also to add, that in the account of the case of Dr. ——, at Seacombe, mentioned in my last, I should have said that the examination which he made was before, and not after, the verdict of the Jury. Mr. Flynn mentioned also at the Medical Society's meeting, subsequent to that at which he reported his case of rupture of the uterus, that he found that the cause of death had been recorded as "unknown," and was not certified by the Coroner.

Royal Medical Society of Edinburgh.—Office-bearers for Session 1861-2: *Presidents*—John Duncan, M.A., Edinburgh; John Anderson, M D., Edinburgh; Thomas R. Fraser, Calcutta; Dyce Duckworth, Liverpool. *Treasurer*—John F. Macfarlan. *Hon. Secs.*—R. J. B. Cunynghame, Edinburgh; Arthur Gamgee, Edinburgh. *Curator of Library*—John Berryman, M.D., New Brunswick. *Curator of Museum*—Wm. Russell, Edinburgh. *Sub-Librarian*—Wm. Thomson.

GENERAL CORRESPONDENCE.

ON ANIMAL ELECTRICITY.

Letter from Dr. Du-Bois Reymond.

[To the Editor of the Medical Times and Gazette.]

Sir,—An English friend sent me a short time ago a number of your valuable periodical (No. 588, October 5, 1861, p. 358), containing a correspondence from Zurich, dated September 14, which touches me too nearly for me to permit it to pass unnoticed.

Your correspondent, after a fine exordium, wherein he laments the instability of physiological discovery, gives an account of some experiments of Professor Moleschott, of Zurich, and of Professor Budge, of Griefswald, tending to invalidate some of the principal results of my researches in animal electricity. Professor Moleschott, on repeating my experiments on the negative variation of the nervous current during the state of activity of the nerves, has, under certain circumstances, obtained a positive variation instead of a negative one, and concludes therefrom that the state of activity of the nerve is not, as it was admitted I had shown, invariably attended by a negative variation of its current. Professor Budge, on trying to verify the law of the muscular current on the gastrocnemius of the frog, has met with a complete contradiction between the result of the experiment and what he thought himself entitled to anticipate according to my law. He therefore considers this law as irretrievably overthrown by his experiments. He also asserts the paralectronomic layer on the natural transverse section of the muscle to be neither more nor less than "a myth." Your correspondent ends by saying that my reply to these attacks is anxiously expected.

So it may be at Zurich and at Griefswald, but not where the rudiments of electro-physiology are rightly understood. Anyone who has looked over the second volume of my book will be aware how difficult it is to obtain the negative variation of the nervous current during electrical tetanus free from other effects upon the needle which act either in the same or in the contrary direction. He will remember that I have myself several times noted a positive variation instead of a negative one, but that I always have been able to trace this anomaly to one of the sources of error just alluded to. He will remember, further, that it was on account of these disturbances—though I well might have contented myself with having disproved their influence upon my results by almost countless counter-experiments—that I laid such stress upon my having obtained the negative variation during the tetanus caused by strychnia, or, in fact, by any other non-electrical stimulus. He will then, on turning to Professor Moleschott's paper, perceive at once, and not without some wonder, that the learned Professor, although giving a detailed record of all his experiments, does not even allude to these interfering difficulties, and he does not notice the measures he should have taken to avoid them, and for this reason, these experiments, as they are published, must be pronounced absolutely worthless.

As to Professor Budge, I regret that I am obliged to say that his attack upon the law of the muscular current does not deserve any refutation. This law, as it is usually expressed, only applies to a muscle of a regular cylindrical or prismatic shape, such as the adductor magnus, the sartorius, or the rectus internus of the frog's thigh. The gastrocnemius, as I have shown in my book, has a very complicated structure, in consequence of which its upper natural transverse section is entirely hidden in the muscle; and it is not less erroneous to apply without modification to such a muscle a law deduced from the observation of a regular shaped muscle than to seek for the centre of gravity of a cone or a pyramid in the middle of its axis, because this would be its place in a cylinder or a prism. Nothing, however, is easier than to explain the electric currents of the gastrocnemius in accordance with the law of the muscular current, taking into account the irregularity of its configuration.

Finally, Professor Budge declares the paralectronomic layer to be "a myth," but he hitherto has confined himself to this bare assertion, without either showing that my experiments are wrong, or proposing another theory to account for them.

I hope I shall be excused if I venture to doubt the possibility of any mistake in my experiments. If Professor Budge at some future time should propose a new theory, he will find me ready to give up my hypothesis for any other more simple and as satisfactory.

I am, &c.

Berlin, December 11. E. Du-Bois Reymond.

ELASTIC EXTENSION IN TREATING DEFORMITIES.

Letter from Mr. Bigg.

[To the Editor of the Medical Times and Gazette.]

Sir,—My attention having been called to your report of a discussion which followed the reading of Mr. Barwell's paper "On a New Method of Curing Deformities of the Feet," at the Royal Medical and Chirurgical Society, at their meeting on the 23rd ult., in which my name was freely mentioned, I venture to claim space in your valuable Journal for some few remarks on the subject in question.

In my humble opinion, Mr. Barwell would have done wisely had he first consulted some experienced mechanician as to the actual novelty of his supposed discovery, for doing so would have spared him that ridicule which must inevitably cling to his communication, when it is known that the application of india rubber cords in the curative treatment of club-foot has been extensively adopted for nearly eight years.

The invention of this new plan dates from 1854, when, while I was seeking for some means of applying the mechanical power required for the cure of deformities in such a manner as would simulate the force and direction of those muscles which are in an abnormal condition, and at the same time extend their contracted antagonists, I hit upon the idea of using the contractile force of vulcanized india-rubber bands. So well did they fulfil my expectation that, notwithstanding their application in many hundreds of cases, a slough has never arisen during their employment.

In support of my right to priority of invention, I must, even at the risk of a charge of egotism, quote from my own published works, in order that I may prove for how long a time this new method has been in use.

At page 83 of the Appendix to my "Artificial Limbs," 1855, and under the head "Varus" is described "an apparatus governed by elastic cords (so placed as to antagonise the contracted tendons) and possessing the advantage of permitting muscular motion whilst the treatment is proceeding."

At page 97 of my "Mechanical Appliances," etc., 1858, when writing on varus, I state "that I have for a long time past employed india-rubber cords for this purpose, and consider that if they are applied with care, their mode of action is far superior to that afforded by any other mechanical agent with which I am acquainted."

Again, at page 173, when describing an appliance for extending the knee, I go on to say "the constant traction of this elastic substance maintains a never-ceasing extensile force upon the contracted muscles." And also at page 198, while describing an apparatus for a contracted hip-joint, "a strong vulcanised india-rubber ring is stretched, the retraction of which exerts a constant expansive power on the flexors of the thigh."

In the three latter instances explanatory drawings are appended.

I also exhibited at the University College *conversazione* in 1860, a spinal apparatus so devised that the actions of the vertebral muscle were represented by vulcanised india-rubber cords.

Thus far I establish the fact that my inventive ideas have been *mis*-appropriated by Mr. Barwell, and without acknowledgment.

Unfortunately, however, in the ensuing discussion, Mr. William Adams having (with characteristic generosity) stated that I originally invented Mr. Barwell's "new method," and had shown him a case in St. George's Hospital, Mr. Pollock gave a denial to the latter part of his statement by declaring that I had never tried any instruments at St. George's Hospital at any time, but was "merely the Hospital instrument maker." Every professional man knows that a plan of this kind can never be adopted in a public Hospital without the approval and sanction of its Medical officers, who are generally only too ready to adopt any really valuable invention; but I must in self-defence avow that during the sixteen years for which I have devised mechanical appliances for the patients of this Charity, I have never received any absolute direction concerning the shape or action of the apparatus to be adopted, such points being left to my own experience and discretion, subject to subsequent approval on the part of the Surgeons when applied.

I find that Mr. Adams erred in stating that I showed him a case at St. George's in which the elastic cords were applied; but, in point of fact, I really had used it there on a child in Cholmondeley Ward.—*Vide* "Hospital Register," November 4, 1854.

In conclusion, I take the liberty of informing Mr. Barwell that the value of vulcanised india-rubber cords as a musculo-correlative power in the treatment of deformities, can scarcely be overrated. Should your readers wish to know how far the new plan of antagonising contracted muscles by india-rubber has been successful, I will gladly furnish the necessary information from actual cases.

In answer to Mr. Pollock, I need merely give the following extracts from my case-book, or refer to St. George's Hospital Surgical Register:—

November 4, 1854.—William D., aged 5—Cholmondeley Ward—apparatus for varus with elastic cords—discharged July 18—relieved.

January 13, 1858.—Matthew M., aged 4—Drummond Ward—varus—pair of orthopedes—an experiment, and consequently never charged to the Hospital.

The first case proves my employment of india-rubber cords in club-foot in 1854; the second is the one shown by me to Mr. W. Adams when anxious to explain to him a new principle of acting from a single centre, but *not* with india-rubber cords.

The cases referred to are of course entered in the Surgical Register of St. George's Hospital.

I am, &c. Henry Heather Bigg.

29, Leicester-square, London, W.C., Dec. 9.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, December 10.

Dr. Babington in the Chair.

A Paper by Mr. Nunneley was read, giving an account of

A CASE IN WHICH THE ENTIRE TONGUE HAD BEEN SUCCESSFULLY REMOVED FOR CANCER OF THE ORGAN.

The subject of the case related in this communication is a man, aged thirty-five, who states that, with the exception of the disease in his tongue, he never had a day's illness. In early manhood he was not very steady; but for the last twelve years he has been so. He has been married many years, and has had eight children, the youngest being only six months old; all of them have been strong and healthy. There is no reason to suspect any syphilitic taint. For some years he has been employed on a railway, and latterly as a guard. From being a large, strong man, owing to the distress and pain he has suffered and the inability to masticate food, he has become thin, weak, and anæmic. The disease, at first slow, had latterly made more rapid progress, and having not unfrequently been compelled to pass the whole day without food, owing to the pain the attempt to take it occasioned, he was wishful to submit to any operation which afforded a chance of not dying from starvation, which he anticipated would otherwise be the result. He had been subjected during nearly the whole of the three years the disease had existed to treatment of various kinds, both general and local, all of which he thought had been rather injurious than beneficial. The disease, which was first perceived on one side of the tongue, had invaded the whole structure of the organ as far as the base. In the centre of it was a deep ulcer with irregular edges; the margin of the tongue was tuberculous

and irregular, and the whole substance was dense, unyielding, and very hard; the size was somewhat, but not very greatly, increased; there was a constant offensive taste, owing to the discharge from the ulcer; the speech was considerably impaired. As removal of the entire organ, though difficult and dangerous, afforded the only means of recovery, and as the patient was quite willing to submit to the risk, the operation was determined upon. Having experienced the difficulty of effectually strangulating any considerable portion of the tongue, and the distress it occasions, Mr. Nunneley was unwilling to employ ligatures for the whole, and resolved upon using the écraseur, first cutting an opening for it between the lower jaw and the os hyoides as deeply as could be done without fear of hæmorrhage, and also with the object of having as little structure to crush through as possible. In accordance with this, a small transverse incision was made just anterior to the os hyoides through the integuments, myo-hyoid and genio-hyoid muscles, by which a curved needle, sufficiently large to allow the chain of the écraseur, which was attached to it, to follow easily, was carried from the central line obliquely towards the left side of the base of the tongue into the mouth, and out of the mouth at a corresponding point on the right side, through the same external aperture by which it had entered. The chain thus carried across the extreme base of the tongue was then attached to the racket-bar, and the écraseur set in motion, when, owing to the defective rivets connecting the link of the chain, before any strain whatever was put upon the instrument, two of them dropped asunder. All attempts to make them hold were ineffectual, and it had to be abandoned. Threads of strong, fine whip-cord were at once carried along the same course as the chain had followed, and tied, both as single and double ligatures, with all the force that could be exerted. At first the patient suffered very greatly; he could neither swallow nor talk. Nutritive enemata, containing acetate of morphia, according to circumstances, were given, with great comfort and advantage. On the fourth day he was much improved. On October 10, though the ligatures had cut so far into the base of the tongue that they could neither be seen nor felt, yet, as the organ was regaining a more natural appearance, a very strong ligature of silk whip-cord was tied round the base as tightly as possible, and another cord carried through the fissure cut in the base round under the frænum so as to constrict the sublingual attachments, with the effect of apparently well and effectually strangulating the organ. He again improved so much as to require but little morphia, and was able to swallow liquid food with comparative facility, until the night of the 15th, when hæmorrhage to the extent of a pint of blood came on. Though this was arrested by a solution of permuriate of iron, it recurred frequently, and though in smaller quantities, and always at once cheked by the solution of iron or tannic acid, he was so much reduced that it was determined on the 17th to place another ligature round the base of the tongue. This effectually arrested the bleeding for fifty-four hours, when it again returned so freely that ligatures were carried round both the base and under the frænum in the same manner as on the 10th. On this occasion, however, a new material (which was exhibited to the Society) was advantageously used. There was no more bleeding until the 23rd, when it again recurred to some extent three different times, and necessitated the reapplication of the ligatures in both situations. Not the least pain was experienced on this occasion, showing the nerves had already been divided. There was no subsequent return of the hæmorrhage. On the 30th two other ligatures were applied, no pain whatever being caused in so doing. On November 2nd, as the tongue was still firmly attached, though apparently cut through at the base, a twisted double steel suture wire was carried round it under the frænum, and by means of a suitable apparatus twisted well home until it broke, without, however, cutting through the tissues. This plan was repeated on the 3rd with a much stronger wire (a strong pianoforte string), which also gave way before completely severing the connexions. A repetition of this on the 4th cut through the sublingual tissues, and the tongue was free. Neither pain nor the loss of any blood occurred in any of the last four or five operations. There was so little wound to heal that it was well the next day, proving that, as suspected, the base had been cut through for some few days. A mass of knotted thread and wire was removed on the following day, but two or three threads were so deeply imbedded and so fast that many days elapsed before the last was taken away. The knots were perfect, showing how great an amount of force had been exerted without complete strangulation being effected; proving also that, though the base of the tongue be completely cut through, the sublingual connexion alone is sufficient to maintain the vitality of the organ. From this time the patient may be said to have been well. The next day he ate with great gusto a hearty dinner of roast duck. He rapidly improved in flesh and strength. The facility with which he can masticate and swallow is surprising; indeed, he says he can do so much better than for the two previous years. The deglutition of liquids, as might be supposed, is more impaired than that of solids. The sense of taste is enjoyed in a very considerable degree, while the power of articulation is great beyond all expectation. He can pronounce every letter of the alphabet, many of them perfectly (all the vowels), most of them distinctly. The three there is the most difficulty in are K, Q, and T, which are difficult and indistinct in the order they are named, K being much more so than T. In conversation he can be readily understood, if not excited or hurried; if he be, some words are indistinct, otherwise his power of articulation is sufficient for all purposes of intercourse, so much so that it is probable he will be appointed master of one of the smaller stations on the railway. After referring to the danger which he believes must always be incurred by following the plan of extirpation practised by Professor Syme, which inflicts so great an amount of mischief not directly involved in the mere removal of the tongue, which itself is sufficiently serious, and to the pain, delay, and danger of hæmorrhage incurred by the use of thread ligatures, the Author concluded by recommending in preference the écraseur, introduced by a submental opening made by the knife through all the tissues, which would not occasion much bleeding; and, when from any cause this instrument is not employed, after a deep fissure has been made in the base of the tongue by a submental ligature, an earlier use of strong wire ligatures than was adopted in this case.

Mr. Prescott Hewett asked how long the wound had been healed?

In reply, Mr. Nunneley stated that it had been healed six weeks.

Mr. Prescott Hewett said that he considered it to be rather premature to speak of the cancer being cured, when so short a time had elapsed since the operation. In fact, he did not think that the history supported the idea that it was cancer. Three years was a period rather too long for cancer of the tongue, without affecting the glands. It was not clear that it might not have been syphilis.

Mr. Nunneley then stated that he never said that he did bring this case forward as a case of recovery from cancer, but as an instance of recovery from the *operation* of removing the whole tongue for cancer.

Mr. Brooke suggested that twisted wire cord should be used instead of the chain of the écraseur.

Mr. Nunneley, in reply to Mr. Moore, said that there were no enlarged glands in the neck.

Mr. Moore said that no conclusive evidence had been given that the case was cancer. The tumour was large, hard, and ulcerated; but all hard and ulcerated tumours of the tongue were not cancerous. A case in which a hard ulcerating tumour, eating its way through the tongue, and in which cure followed on the administration of arsenic, was recorded in the Society's *Transactions*. The fact that in the Author's case the disease had lasted three years without affecting the glands, told against its being cancerous. The tongue was undissected, and at its edge covered by thickened patches. It was quite impossible for those who had not seen it to be sure that it was cancer. However, Mr. Moore said, a Surgeon who sees a great deal does not put all he sees on paper, and may observe very exactly without thinking it necessary to give all the evidence which leads to his conclusions. He said that he felt sure that the operations the Author had performed would never be repeated. Mr. Moore then alluded to the facilities afforded in performing the operation by first tying the arteries and dividing the nerves of the tongue.

Mr. Paget said that the Author's paper had shown how great difficulties which had unexpectedly arisen in the operation might be overcome. As to the écraseur, the usual one would answer if fitted with whipcord instead of with a chain.

It would easily cut through the tongue; and it had this advantage over the chain, that by means of carrying it round needles it could be made to cut in a curve. He agreed with Mr. Moore, that the case was not one of cancer. It was difficult to believe, that in a man of only thirty years of age, the disease should exist for three years without affecting the glands. The description and history were more like those of tertiary syphilis of the tongue. The interest of the paper, however, was not in that point. The chief thing was that it demonstrated that if need should arise, the whole tongue might be removed.

The Author said that the patient had never had syphilis; he owned to having had gonorrhœa. The patient had had eight children, the youngest eight months old. They were quite healthy. His wife also was healthy. Again, he had had no other symptom whatever, and had been seen by numerous Medical men. But one of these seemed to entertain any idea of syphilis. He submitted the patient to a course of mercury, but without benefit. The Author did not think that anyone was justified in saying that it was syphilis.

At the close of the meeting, it was suggested that it would be of interest if the patient were to be carefully examined, to ascertain if any evidence of syphilitic infection could be discovered. The man was undressed, and very carefully examined by Mr. Henry Lee and other Members, who were perfectly satisfied that there was no indication of any such taint.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, December 4.

Dr. Tyler Smith, President, in the Chair.

A Paper, by Mr. Robert Ellis, was read

ON CAUTERIZATION BY ELECTRIC HEAT IN THE TREATMENT OF CERTAIN DISEASES OF WOMEN.

After premising that ten years had elapsed since the first publication of the Author's pamphlet on this mode of treatment, and adverting to the fact that the French and German operators had adopted his principles in the construction of their instruments, Mr. Ellis noticed the common objections to the actual cautery, and the advantages possessed by that in which the electric current was the source of heat. These were its perfect controllability, its efficiency, and its great handiness in practical use. The principles upon which cauterization ought to be practised were then laid down, and it was shown that cauterizing agents have a differing ultimate value, and that sufficient regard had not been paid to this fact in determining the nature of the caustic selected by the obstetrist. Some caustic substances were found to produce a sore of greater, and some of less, vitality—a result by no means explicable simply on referring to the differing chemical nature of these substances. The character impressed by the cauterizing agent on the living tissue differed to a greater or less extent in each case. That resulting from the actual cautery had one great peculiarity which especially fitted this agent for the use of the Obstetric Surgeon. This was its very remarkable contractility in the process of healing and afterwards. The cicatrix of a burn, built up of cells of feeble vitality, showed a singular inaptitude for extension, and after a time contracted in a very remarkable manner. It might be conjectured that this singular result—observed in no other instance to the same degree—was due to the nervous shock communicated to the living structures by the burning substance, and ultimately affecting the nutrition of the newly-formed parts. The anatomical nature of the tissues with which the Obstetric Surgeon has chiefly to deal suggested the value of an agent, capable as this, of producing a powerful ultimate contraction of the parts to be treated with it. Their great vascularity, the laxity of their texture, and the slightness of their fibrous framework, exposed these structures to the invasion of a class of diseases in which the congestive prevails over the inflammatory type. These considerations point distinctly to a remedy capable of producing an opposite condition, and such a remedy was to be found in cauterization by heat. The physiological action, therefore, of this agent entitled it to a high position in the estimation of the practical Surgeon. The question of pain was then discussed by Mr. Ellis, and is was shown that the amount of pain produced by cauterizing at a white heat was not greater—in fact, was probably not so great—as that arising from less powerful caustics. This might appear paradoxical, but it was nevertheless true, and might be expiained by recollecting that the stronger caustic agent destroyed the medium by which pain was made known to the sensorium, while the weaker only excited without destroying. In one instance quoted, the patient, of her own accord, stated that less pain was felt by the use of the cautery than of other caustic substances. It was a true axiom in practical surgery, that it was the timid hand which inflicted the greatest suffering, and the rule applied here. Having thus defined the action and effects of cauterization by heat, the Author proceeded to describe the instruments invented by him for producing this effect by the agency of the electric current. The cauterizer originally introduced by him in 1852 was of very simple construction. It consisted of a straight tube of silver, ten inches in length, containing a piece of stout copper wire clothed with an insulating substance. These formed the two poles of the apparatus, and metallic connexion was made between them at the upper end by a fine platinum wire, while at the lower they were in communication with the battery by two wires secured by a clip. The peculiar value of this instrument resided in the introduction under the platinum wire of a piece of porcelain, which acted as the cauterizer, being made white hot on the completion of the galvanic circuit. Up to the date of the introduction of this instrument only the heated wire had been used, and the Author was the first to collect the heat by this means and thus adapt it in a special manner for practical usefulness. For all cases in which a considerable surface required to be treated, this instrument was the most suitable for the operator. But for a great majority of the cases coming under notice, and adapted for this sort of treatment, the following was a more convenient form, and required less battery power:—This cauteriser consisted of the ordinary handle used by dentists for destroying the pulp of carious teeth, with the very commodious button for making and breaking the galvanic connexion. But at its upper end two stout wires, of about seven inches in length, were attached, by being soldered into two silver sockets, which fitted in the ends of the wires issuing from the handle. By this means a tool, twelve inches long, was formed, capable of reaching the os uteri if necessary. The cauterising end was formed of a piece of platinum wire, shaped like an inverted Λ. Hitherto the great obstacle to the success of the electric cautery had been the great size, the cost, and the complicated form of the battery required. Six pint cells of Smee's battery were necessary for the use of the dentist to heat his morsel of wire! But in the battery exhibited by Mr. Ellis to the Society, which was little larger than a glass tumbler, one cell was sufficient, and was sometimes so active as to melt the platinum wire employed. This battery consisted of a cylindrical glass jar with a wide mouth fitted with a cap of gutta percha. Within was a cylindrical roll of amalgamated sheet zinc, a quarter of an inch in thickness, six inches deep, and about seven in circumference. Enclosed by it was a porous earthenware cylinder, containing a roll of platinum coil immersed in strong nitric acid. As in all Grove's batteries, the outer cylinder contained dilute sulphuric acid. The peculiarity of the Author's battery and the principal secret of its remarkable energy lay in the size and form of the platinum roll. Seen in section, it presented a stellate arrangement. It is in fact formed of a sheet of platinum folded upon itself, somewhat like a frill, and thus presenting a very large negative surface. This arrangement was introduced by the Author in accordance with the well-known law, that the negative surface in the Voltaic battery must be as large as possible, in order to collect the diverging lines of chemico-polar induction. The cylindrical form adopted, the close approximation of the acting surfaces, the solidity and mass of the connecting parts, had all received careful study, and were so adjusted as to offer the least possible resistance to the passage of the electric force generated in the instrument. And the result was, that there was probably no battery hitherto known, which in so striking a manner combined the advantages of smallness of size and simplicity of parts, united to such an extraordinary degree of active energy. The Author's object, however, was not the production of an apparatus for the laboratory, but for the practical Surgeon, and to this end he had himself constructed the battery shown to the Society, hoping by this

means to satisfy the members of the Profession as to its simple and inexpensive character. The only expensive part was the platinum, the value of which was about fifteen shillings. The rest of the instrument cost about two shillings and sixpence. The platinum, however, was always valuable, and would realize nearly its original cost at any future time if not required. But the Surgeon must not despise a little knowledge of tinkering in putting the whole together, or he might fail in producing the best effects from the apparatus. By two stout copper wires (No. 15), made soft by heating to redness, and then plunging into cold water, the electric current was conveyed to the cauterizer, and the platinum wire was instantly heated to a glowing whiteness. The Author then proceeded to indicate the diseases to the treatment of which he considered this instrument likely to prove a valuable aid. These were—obstinate ulcerations and congestions of the cervix uteri, resisting all other treatment for a long time; vascular growths from the os and canal of the cervix, which often give rise to tremendous hæmorrhages; also especially the vascular tumours or caruncles of the female urethra; the removal of warty excrescences; and in a peculiarly obstinate form of patchy inflammation apparently of scattered glands on the mucous surface adjoining the meatus, and which frequently gave rise to intolerable pain and pruritus. It might also be useful in closing the minute holes left after the operation for recto and vesico-vaginal fistulæ. In nearly all these cases the experience of the Author during the last ten years had given evidence of the value of the treatment by the electric cautery; and he would select three cases as typical of the benefit obtained from its use. These were not appealed to as evidence, but merely as illustrations:—The first was a case of disease of the cervix uteri—of ulceration and hypertrophy in no common degree. The patient, aged thirty-seven, married, sallow, and unhealthy-looking, had suffered more than six miscarriages in succession, and was in a state of great exhaustion. The general symptoms and cachexia were of the familiar type well known to the obstetrist. The cervix uteri was greatly enlarged, and was deeply ulcerated, the granulations being large, livid, and sanious. After some preliminary treatment, the electric cautery was applied on two occasions with very little pain. In a short time the whole aspect of the diseased surface was altered, and the patient recovered with little, if any, further interference. The next case was one of vascular caruncle of the meatus—a disorder more than commonly rebellious to ordinary treatment. A lady in the country had suffered for many years with one of these growths, the extreme annoyance and distress of which at length induced her, after a fruitless attempt to obtain relief from the application of lunar caustic by the advice of a Medical Practitioner, to apply to the Author. The growth was cut through the base by a ligature drawn very tightly, and soon afterwards it was firmly touched with the cautery. The patient returned home well, and has continued now for some years without any sign of her old disorder returning. The last case was one of intense and agonizing pruritus of the external genitals, connected with the inflamed patches already alluded to. These patches were almost incurable by any ordinary treatment, and the disease had existed for not less than fifteen years in the present instance. The cautery was used to each of these spot in succession, and with the happiest effects, the disease gradually disappearing and the mucous surface regaining its original healthy aspect. In closing his paper the Author remarked, that it could not be too much insisted upon that there was a peculiar benefit arising out of cauterization by heat, which placed it in a different category from all other agencies of this kind, and which especially adapted it for obstetric use, and that was the contractility following its use and the remarkable modification of vitality which it imposed on the structures treated by its means. During the discussion which followed the reading of this paper, Mr. Ellis exhibited to the Society the battery and the cauterizer; the latter was at pleasure raised to a white heat so intense as to kindle gas, and it could be passed through several folds of paper without encountering the least resistance.

Dr. Marion Sims, of New York, expressed his gratification at the success Mr. Ellis had attained in the construction of the instrument. Some years since he had wished to use the electric cautery, but had been deterred from doing so by the great cost of the instrument at that time used, and the extreme inconvenience attending its working. He should take a specimen of Mr. Ellis's apparatus with him to America.

Dr. Barnes observed that the actual cautery was so little practised in this country that the materials, perhaps, were deficient for forming a correct appreciation of its value, and hence the interest of Mr. Ellis's communication. Dr. Barnes had, however, in Paris, seen in many instances hypertrophy with induration of the cervix uteri—a condition in which ordinary treatment by chemical cauteries was so often tedious or unsuccessful—speedily cured by a few or even by one application of the white iron. He had seen women endure this operation without any evidence of pain. The important point was to secure a white heat; a red heat was both more painful and less effectual, and the red iron was apt to stick to the flesh. For this and other reasons he was of opinion that the electric cautery of Mr. Ellis had great advantages, and that it would prove a most valuable addition to our means of healing a class of cases otherwise very intractable.

Mr. Spencer Wells wished to know if the porcelain used by the Author removed one great objection to the galvanic cautery when wire only was used,—namely, the ease with which it was cooled—put out, he might say,—by the blood or fluid of the part cauterised. Years ago, before the distinguished visitor, Dr. Sims, had led the way towards the present ready method of curing vesico-vaginal fistula by sutures of silver wire, he had frequently applied the galvanic cautery to the edges of these fistulæ; but the wire was so soon cooled, and so many applications became necessary, that of late it had been used in the Samaritan Hospital only for destroying vascular growths of the urethra. If by using porcelain cylinders Mr. Ellis overcame this objection, he had rendered the Profession fully as great a service as he had by the arrangement which made the battery so portable.

Dr. Tanner remarked that he spoke with some diffidence after the observations which had been made in praise of the electric cautery by the previous speakers. But although he fully recognised the great ingenuity manifested by Mr. Ellis in the construction of his battery, yet he did not think the instrument was likely to prove so useful in practice as this gentleman appeared to assert. Where the application of the actual cautery was needed, as in some diseases of the cervix uteri, he thought the simple instrument in common use answered every purpose; and he had not found that its employment gave rise to those feelings of alarm which had been dwelt upon. He had formerly freely tried the cautery for the purpose of healing small vesico-vaginal fistulæ, but his success had been so inconsiderable that he felt the proceeding ought to be abandoned. The operation with the silver-wire sutures for curing these cases was now so perfect, that, in his opinion it should always be resorted to in preference to experimenting with the cautery. Mr. Ellis had remarked in his interesting paper that the actual cautery was especially applicable to the treatment of vascular tumours of the urethra; but he (Dr. Tanner) found no difficulty in radically curing these painful growths by excising them with a pair of well-pointed scissors, and afterwards applying a small drop of nitric acid to the wound. Injury to the surrounding parts by the acid was easily prevented by using a little cotton wool soaked in a strong solution of carbonate of soda.

Dr. Graily Hewitt thought there could be no question as to the fact that the instrument exhibited was most complete, ingenious, and admirably adapted for cauterizing purposes. The instrument, however, was one thing, its applicability another, and he could not agree with the Author in considering that the use of the cautery in this form was necessary in the treatment of uterine disease, unless in very exceptional cases. For the destruction of vascular tumours of the urethra, in the removal of certain affections of the external generative organs to which the Author had alluded, the electric cautery was doubtless both efficacious and suitable. With reference, however, to that large class of cases, of which the Author had given a typical instance, in which there is so-called "ulceration" of the os uteri, he must express his opinion as decidedly opposed to this part of the Author's practice. Such cases would be best treated by other and more simple methods, the "ulceration" not being ulceration at all, in the true sense of the word; and with respect to indurations of the cervix, he had found a simpler treatment than that by strong caustics usually successful. The extensive application of the actual cautery to disorders of the os and cervix uteri was, as he believed, unnecessary, and without a legitimate foundation in true views of uterine pathology.

Mr. Robert Ellis, in reply to Mr. Spencer Wells's inquiry,

said that this cautery was both furnace and cauterizer united in one instrument, and therefore its caloric was less easily lost (or rather quicker restored) than that of the ordinary actual cautery, and not so likely to be extinguished by blood and other fluids, the electric current sustaining its temperature to a certain extent. In reply to Dr. Tanner, he reminded the Society that it was not for closing a fistula that he proposed this instrument, but for completing that work when minute apertures were left after operation. Also that in his experience the treatment of the vascular caruncle and the inflamed patch was most obstinate and disheartening under the use of ordinary escharotics, and in this he was supported by that of Professor Simpson, who actually proposed to excise the little bits of mucous membrane which he was unable to cure by caustics. Others also had met with a similar ill-success. But the treatment by the cautery was surprisingly useful and painless, and of its ultimate value he had very sufficient and gratifying evidence. In reply to Dr. Graily Hewitt, he might take occasion to remark that the present was not the opportunity for discussing the long-vexed question of ulceration of the cervix; as to its existence and the value of the treatment he had suggested, his own mind had long been satisfied.

Dr. Meadows related a case of

INGUINAL HERNIA OF THE RIGHT OVARY

successfully treated by operation. The patient was twenty-three years of age, and had suffered from hernia of the ovary for three years. The tumour was removed by Mr. Lawson. No bad symptoms followed the operation, and the patient quite recovered in about three weeks, with entire cessation of the sufferings which had previously attended every menstrual period.

Dr. Gibb communicated a case of Inflammatory Disease of the Skin of the Head and upper part of the Body of an eight months' Fœtus, with Exudation of Plastic Lymph.

Dr. Gibb also related a case of Simulation of Pregnancy from the effects of an extensive Burn, where a negative Cæsarean Operation was attempted immediately after death.

OBITUARY.

DR. SOUTHWOOD SMITH.

It is our painful duty to record the death of the eminent Physician and father of sanitary reform, Dr. Southwood Smith, who died at Florence on December 10, after six days' illness, from bronchitis. Southwood Smith was born at Martock, in Somersetshire, on December 21, 1788, and was, therefore, at his decease, within eleven days of completing his 73rd year, though, from the length of time his name has been before the world, he was generally thought much older. Originally educated for the Christian ministry, the name of Southwood Smith was early brought into repute as the author of "Illustrations of the Divine Government," which passed through several editions. The duties of the pastoral office having brought him much in contact with the poor, his penetrating and benevolent mind readily perceived how greatly physical suffering contributes to moral degradation, and he entered upon the study of Medicine at Edinburgh, with a view to administer healing to the body whilst conveying spiritual consolation and admonition to the soul. Accordingly, for some time after receiving his diploma, Dr. Southwood Smith united the offices of pastor and Physician at Yeovil. Employed in this manner, the miserable condition of the dwellings of the poor became firmly associated in his mind with the undue prevalence of preventible disease, especially of fever.

Dr. Southwood Smith's next publication was a work on "The Philosophy of Health," which reached a tenth edition.

It has fallen to the lot of few to accomplish such extensive services for the public benefit as have been subsequently rendered by Dr. Southwood Smith. He was the chief originator of the science of Preventive Medicine as systematically applied in this country, and the clearness and force of his writings made him very successful in popularising the leading principles of national health.

Appointed Physician to the London Fever Hospital and the Eastern Dispensary in 1824, Dr. Smith spent several years in the wards of the one and visiting the patients of the other in their squalid abodes; at the same time embodying the results of his observations in a work described by the *Medical Chirurgical Review* as "the best work on fever that ever flowed from the pen of Physician in any age or country." He there proved that epidemic fever is the great pauperiser of the land, and that it is preventible: and it has been truly said, that "the man whose zeal and energy brought these facts to light deserves to be ranked in the number of his country's benefactors."

Called, during a violent typhus epidemic in 1837, to the assistance of the Poor-Law Commissioners, he presented two valuable reports on the causes of sickness among the poor, which are capable of prevention. In 1839 he was chiefly instrumental in forming the "Health of Towns Association" materially aided a committee of the House of Commons on the same subject in 1840, and served during the same year on the Children's Employment Commission.

In 1842 he took an active part in founding the "Metropolitan Association for Improving the Dwellings of the Industrious Classes." From the first, indeed, he had laboured to impress on the public mind the now admitted truth, that a certain amount of physical comfort is necessary to morality and religion; "that," in his own words, "moral degradation is indissolubly united with physical squalor—moral impurity with bodily impurity—and that it is only when the house ceases to be a sty, and is rendered capable of becoming a home, that it can receive with any hope of benefit the schoolmaster and the minister of religion." In 1844 he gave most impressive evidence before a Commission for inquiring into the health of towns, and in 1847 was appointed on the Metropolitan Sanitary Commission. In 1848 the "Public Health" and "Nuisances" Acts were passed, when Dr. Smith was appointed Medical member of the General Board of Health; but for nearly twelve months his services were rendered gratuitously. In 1850, however, he was appointed permanently to the Board, and altogether relinquished Professional practice.

Of his labours as a member of the Board of Health, his Reports on Cholera, his notifications relative to that pestilence, and especially his introduction of the system of house-to-house visitation, bear witness. But he at the same time established additional and irresistible claims to public gratitude by the authorship of the "two admirable Reports on Quarantine, which have obtained a world-wide celebrity."

"If (said Dean Peacock) Dr. Southwood Smith had no other claims on the lasting gratitude of the nation, I would refer to his Reports on Quarantine as quite sufficient to establish them. They have contributed more than any other publication on this subject to dissipate the gross and mischievous delusions upon which these regulations are founded, and which are known to be so injurious to the free commercial intercourse and prosperity of nations."

For some considerable time prior to his decease Dr. Southwood Smith had been actively engaged in preparing an entirely new and complete edition of "The Philosophy of Health." Another edition of "The Divine Government" was also in preparation, and in all probability both these works will shortly be republished.

MR. JOHN SUTTON, M.R.C.S.

Mr. John Sutton died at his residence, The Glebe, Lee, Kent, on the 12th instant, aged 81 years. Until within the last two years he enjoyed uninterrupted health, which may be attributed in a great measure to his active and temperate habits. Mrs. Sutton died seven days previously, and both were interred in Lee church, on December 17.

So long ago as 1801 he passed the Royal College of Surgeons, and subsequently became House-Surgeon to St. Bartholomew's Hospital, after which he settled in general practice at Greenwich, and continued there for half a century, attending with equal interest both rich and poor, and winning from both for his skill and urbanity "golden laurels." As a natural sequence Mr. Sutton became a man of wealth, and wisely husbanding his income added rapidly to his means. He never, however, ceased to forget the high claims of charity, into whose lap he failed not to give, it is believed, very liberally.

In addition to his Professional duties, Mr. Sutton devoted much time to corporate and borough affairs, and thus aided

the development of many valuable improvements. As a director of the Pier Company, Greenwich, his clear intellect and manly bearing favoured, amid much opposition, the final success of this undertaking. For the last ten years of his life Mr. Sutton sought comparative quietude, and removed to Lee; still, however, pursuing his Professional avocations, and finding in his new sphere objects and duties suited to his active and benevolent mind. The secular affairs of the Church, county, district, and parochial business received much of his valuable time and experience, for he was never unoccupied, and what he did was done with order and method, consequently his multifarious engagements were so well regulated that he had time and means at his disposal which only men of his character can command. The Kent Medical Benevolent Society long claimed him as an office-bearer; the Royal Medical Benevolent College received his hearty support; and he was President of the Kent Medico-Chirurgical Society. Two grandsons bearing his name, and one son-in-law, are in the ranks of our Profession.

In just acknowledgment of Mr. Sutton's successful life he was placed on the County Magistracy, and, more recently, made a Deputy-Lieutenant. His history remains to us as an example of the sure rewards of a steady perseverance in the path of duty.

DR. CATHCART LEES, M.B., F.K. & Q.C.P.I.

On December 16, at Lower Fitzwilliam-street, Dublin, in his 51st year, Dr. Cathcart Lees. He was for many years Physician to the Meath Hospital, to which he was appointed on the resignation of the late Dr. Graves. Some months ago he was himself obliged by ill-health to relinquish the Hospital, when he was succeeded by Dr. Hudson. He was also Lecturer on the Practice of Physic in the Ledwich School of Medicine. Dr. Lees was an ardent lover of his Profession, and a diligent and painstaking teacher. His writings consist chiefly of practical essays, published in the *Dublin Journal of Medical Science*. The only separate work which he produced was his "Lectures on Diseases of the Stomach and on Indigestion," and he thus affords another example of a Physician dying of a disease of the class which was the principal object of his study during life, for the symptoms under which he laboured left no doubt that his long and distressing illness depended upon an organic affection of the stomach.

MEDICAL NEWS.

Royal College of Physicians of London.—At the Comitia Majora, held on Saturday, December 14, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Arthur, William, Government Emigration Service
Deyns, Frederick, M.D., Grundisburgh, Suffolk
Eaton, James William, Ilkeston
Godwin, Ashton, 11, Pelham-crescent, Brompton
Jones, Morris, Aberystwith
Liddard, Thomas, 10, Clarendon-road, Notting-hill
Middlemist, Robert Percy, 13, Great Coram-street
Ruttledge, William Frederick, Summertown, near Oxford
Ryan, Edward Tenison, 8, Keith-terrace, Shepherd's Bush
Travers, William, Charing-cross Hospital.

The following gentlemen passed the first part of the Professional Examination for the Licence on December 6:—

Atkins, Charles Alfred, St. George's Hospital
Deck, John Field, St. Thomas's Hospital
Lattey, James, St. George's Hospital
Leigh, Thomas, St. George's Hospital
Lloyd, Nathaniel Hellings, St. George's Hospital
Ralfe, Charles Henry, King's College Hospital.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, December 12:—

Baker, John Copleston, Romsey, Hants
Clarke, Sidney Edward, Armathwaite, Cumberland
Gilson, Francis George Scratton, University College Hospital
Gowland, John Edward, Surrey
Ha-lam, George Herbert, Market Drayton
Ling, William Squire, Gorleston, Suffolk
McCarthy, Edward, County Dispensary, Norwich
Rogers, William Goddard, St. Bartholomew's Hospital
Smart, John Naish, Bedminster, Bristol
Warrington, Francis William, Congleton
Watts, Horace N., Great Northern Hospital.

The following gentleman also on the same day passed his First Examination:—

Lloyd, Nathaniel Hellings.

As Assistants—

Clarke, William Henry, Fulham-road
Cowl, William, Harrow-road.

APPOINTMENTS.

Brown.—Arthur Boyer Brown, M.R.C.S. Eng., L.S.A. Lond., has been elected Assistant-Surgeon to the London Surgical Home for Diseases of Women.

Danson.—M.D. St. And., M.R.C.S. Eng., has been elected Physician to the Metropolitan Dispensary and Charitable Fund, Fore-street, Cripplegate.

Dibb.—Mr. Edward Napier Dibb, has been elected Assistant Resident Medical Officer to the General Infirmary, Leeds.

Dunne.—John Dunne, M.D. Trin. Coll. Dub., F.R.C.S. Irel., M.R.C.S. Eng., has been elected one of the Physicians of the East Sussex, Hastings and St. Leonard's Infirmary.

Gammie.—Patrick Gammie, M.R.C.S. Eng., Deputy Inspector General from Devonport, has been appointed Principal Medical Officer at Chatham.

Harrison.—Charles Harrison, M.R.C.S. Eng., L.S.A. Lond., has been elected House-Surgeon and Apothecary to the Lincoln County Hospital.

Hawkins.—Francis Hawkins, M.D. Oxon., F.R.C.P. Lond., has been appointed Physician in Ordinary to Her Majesty's Household.

Malony.—John Malony, L.R.C.S. Irel., and L.M., has been appointed Medical Officer to Cappoquin District, in the Lismore Union, County Waterford.

Parks.—Dr. Parks, R.N., has been appointed Medical Officer to the Ballyduff Dispensary District, in the Lismore Union.

Sealy.—George John Sealy, M.R.C.S. Eng., L.S.A. Lond., of King's College, has been appointed House-Surgeon to the West Kent Infirmary, Maidstone.

Swinson.—George Newton Swinson, M.R.C.S. Eng., L.R.C.P. Edin., has been appointed Medical Officer and Public Vaccinator of the Kidlington District, in the Woodstock Union, Oxfordshire.

Tapson.—Joseph Alfrod Tapson, M.R.C.S. Eng., L.S.A. Lond., has been appointed General Medical Officer to the British Orphan Asylum.

DEATHS.

Askwith.—November 27, John Haddon Askwith, of Brunswick-place, Pendleton, Manchester, M.R.C.S. Eng., aged 47.

Atkin.—December 13, George Atkin, of Hull, M.D. Univ. Edin., aged 46.

Bossy.—December 14, at Brudenell-place, New North-road, Islington, Lewis Bossy, M.R.C.S. Eng., L.S.A. Lond., aged 42.

Bricheteau.—December 9, at his country seat, this distinguished French Physician. He was the pupil, friend, and *collaborateur* of Pinel, the author of some well-known works, and formerly President of the Academy of Medicine.

Currie.—November 29, at Upper Swainswick, near Bath, Charles David Currie, M.D., Surgeon-Major in H.M.'s Indian service, Madras, aged 44.

Denniss.—November 27, at Bagby, near Thisk, Yorkshire, J. Denniss, of Bishop Auckland, aged 25.

Holmes.—December 9, Richard Holmes, of Newburgh, near Ormskirk, Lancashire, formerly of Wigan and Chorley, M.C.P. New York, (in practice prior to 1815,) aged 78.

Ives.—October 8, Eli Ives, M.D., LL.D., aged 83, one of a celebrated race of Physicians of that name, and one of the Professors of Yale College, to whose exertions and Professor Sillimon, indeed, the foundation of the Medical Department of this College was due. He taught Materia Medica for sixteen years, and the Practice of Medicine for twenty-three years, and in early life enjoyed the largest consultation practice in the State of New York. He exerted a great influence in the promotion of the cause of the Temperance Reformation,

Johnson.—December 11, at Landport, Hants, Thomas William Johnson, formerly of Weymouth, Dorsetshire, M.R.C.S. Eng., aged 78.

Johnson.—December 12, suddenly, Frederick Henry Johnson, of Fawcett-street, Sunderland, L.R.C.P. Edin. (exam.) M.R.C.S. Eng., L.S.A. Lond.

Keith.—December 5, at Edinburgh, Dr. James Keith, late Civil-Surgeon at Poonah.

Lees.—Recently, Cathcart Lees, of Lower Fitzwilliam-street, Dublin, M.B. Univ. Trin. Coll. Dub., F.R.Q.C.P. Irel., aged 49.

Major.—November 13, Allan Major, of London-street, Derby, M.D. St. And., M.R.C.S. Eng., L.S.A. Lond., aged 39.

Roy.—Recently, Daniel Thomas Roy, of Brook-green, Hammersmith, L.R.C.S. Edin.

Sandie.—December 13, at Liverpool, John Grey Sandie, formerly of Gorebridge, Edinburgh, M.D.

Scott.—December 8, at Lothian-villa, Cheltenham, George Scott, M.D., aged 70.

Thomasson.—November 29, John Thomasson, of Blanchard-street, Chorlton-upon-Medlock, Manchester, aged 44.

Unger.—October 2, Dr. Edward R. H. Unger, Surgeon on board the *Gartsherrie*, Old Calabar, Western coast of Africa.

Whitestone.—December 4, at Newtown-buildings, Waterford, Luke W. Whitestone, M.D., F.R.C.S. Irel., aged 77.

A VERY handsome service of plate has been presented to Dr. J. C. Hall, of Sheffield, by the subscribers to the Sheffield Public Hospital and Dispensary, in acknowledgment of his long and valuable services to that Institution.

ELECTION OF PROFESSOR VIRCHOW.—This eminent Professor has just been chosen as one of the Liberal Deputies to the Prussian Chamber.

BEFORE proceeding to the business of the Meeting of the Council of the Royal Medical Benevolent College, on Wednesday, the 18th inst., it was unanimously resolved to record their deep regret and sympathy in the loss that Her Majesty the Queen, the Royal Family, and the nation have sustained in the lamented death of his Royal Highness the Prince Consort.

A SCENE AT THE ACADEMIE DE MÉDECINE.—A Dr. Pamard, of Avignon, one of the new Deputies of the Chambers, having styled himself Corresponding Member of the Academy of Medicine, the *Indépendance Belge* declared to its readers that he had no right whatever to this title, which it seems he has borne for years. The title was really conferred upon his father, in 1825, when he himself was only 23 years of age. Since his father's death, in 1828, he has always continued to appropriate it. One would think that this was a matter of easy determination by reference to the records of the Academy; but so badly have these been kept, that it is found that they are of no avail in the matter. At a meeting of the Academy upon the subject, the most violent altercations, affirmations, and denials took place, and it ended in an uproar, without it having been determined whether the worthy Doctor-deputy was the real Simon-Pure or not.

SURGICAL SOCIETY OF IRELAND.—The first meeting for the present Session of this Society was held on Saturday evening, the 14th inst., in the Examination Hall of the Royal College of Surgeons in Ireland. In the absence of the President, Dr. Jameson, the chair was taken, and the opening address delivered, by Dr. Mackesy, of Waterford, Vice-President of the College and of the Society. The Chairman, in alluding to the fact of his being the first provincial Surgeon who was ever selected for the honourable position in the College and in the Society which he now occupies, referred to his election as a proof of the kindly feeling which he had ever found to exist between the metropolitan and the provincial Surgical Practitioners of Ireland. Having spoken of the great losses experienced by the Society within the last few months, in the deaths of Dr. Cusack and Professor Porter, he gave, at considerable length, a sketch of the life and character of the late Dr. Kingsley of Roscrea, the philanthropic founder of the Royal Medical Benevolent Fund Society of Ireland. On the conclusion of the Vice-President's address, valuable communications were made by Professor Macnamara and Mr. Tufnell; and after interesting discussions upon the same, the meeting separated.

MEMORIAL TO THE LATE SIR HENRY MARSH, BART.—A numerously attended meeting of the subscribers to the "Marsh Testimonial" was held on Friday afternoon, the 13th inst., at 4, Merrion-square West, the residence of Dr. Corrigan, President of the King and Queen's College of Physicians in Ireland, to determine finally what the nature of the proposed memorial should be. The report of the Committee having been read by the Secretary, Mr. Henry Cusack, it was moved by Dr. Beatty, seconded by Sir John Kingston James, Bart., and unanimously resolved, in accordance with the recommendation of the Committee,—"That a marble statue be erected to the memory of the late Sir Henry Marsh, in the Hall of the new College of Physicians." It is calculated that the New College, which is about being erected in Kildare-street, Dublin, and the statue, will probably be completed at about the same time, viz., in two years from the present date.

UNIVERSITY OF DUBLIN—At the Winter Commencements held in the Examination Hall of Trinity College on Wednesday, December 18, the following degrees in Medicine were conferred:—*Baccalaureus in Medicinâ*—Abrahamus Hopkins. *Doctores in Medicinâ*—Alfredus Hudson, Edvardus R. Townsend, Johannes Kellock Barton (*Stip. Cond.*). The question of postponing the Commencements in consequence of the death of His Royal Highness the Prince Consort, had been under consideration; but it was finally felt that the consequent inconvenience and expense to those who had come from a distance, or who had remained in town for the purpose of receiving degrees, would be too great to justify such a step. Nothing was, however, omitted which could mark the deep feeling of grief which at present pervades the city of Dublin, in common with the rest of the United Kingdom. The mace of the University was covered with black crape, and up to the hour appointed for holding the Commencement, the fine bell of the College tolled forth its mournful death-peal. In the absence of the Chancellor (the Archbishop of Armagh) and of the Vice-Chancellor, the degrees were conferred by the venerable Vice-Provost, the Rev. Chas. Wm. Wall, D.D., who obtained his fellowship as far back as 1805, the same year in which the Chancellor was consecrated Bishop of Cork. The latter has thus sat upon the episcopal bench for the probably unprecedented period of nearly fifty-seven years, and wants but a few months of having held the Primacy of Ireland during forty years.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 14, 1861.

BIRTHS.

Births of Boys, 924; Girls, 876; Total, 1800.
Average of 10 corresponding weeks, 1851-60, 1703·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	641	642	1283
Average of the ten years 1851-60	649·1	608 9	1258·0
Average corrected to increased population..	..	..	1384
Deaths of people above 90	..	1	1
Deaths in 15 General Hospitals	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,373	..	7	7	1	8	10	4
North ..	618,201	..	3	17	3	12	16	3
Central ..	378,058	2	5	17	4	11	15	3
East	571,129	1	3	9	2	15	12	3
South ..	773,160	1	7	28	5	9	6	2
Total.. ..	2,803,921	4	25	78	15	55	59	15

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. Martin's note arrived too late for insertion this week.

A Subscriber, Wilts.—We believe the opinion of our Subscriber is shared by most men of experience who have given any attention to the subject.

K.—A Subscriber in the West Indies.—Our correspondent should be careful not to incur the charge of lowering the rate of professional remuneration; but if he was requested to undertake an office at a proper salary, we see no reason why he should refuse it, supposing all the facts of the case to be before us.

L.R.C.P.—We cannot answer the question better than by repeating the following reply, given by a former President of the College to an Homœopath who wished to become a candidate for the licence:—

"Sir,—The foundation of the Royal College of Physicians was for the purpose of guaranteeing to the public skilful and safe Physicians. The College of Physicians regard the so-called Homœopathists as neither skilful nor safe practitioners. Therefore the College cannot, without betraying a sacred trust, give its licence to persons whom they regard as wholly unworthy their confidence, and with whom it is not possible they can hold any communion. I am, &c.,

JOHN AYRTON PARIS."

TREATMENT OF CHOLERA.

We had marked Mr. Maunsell's letter for insertion; but as it has appeared in another journal, it is not now admissible. So many Medical libraries, clubs, book societies, etc., take several weekly journals, that it is unfair to readers to fill several journals with the same papers.

M.D. CANTAB. AND M.R.C.S.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I can scarcely believe that the paragraph in your last number, respecting the case of an "M.D. Cantab" practising as a Surgeon is otherwise than a hoax. As a Cambridge Graduate I have always considered myself to belong to a class who practise as "Physicians" in the true sense of the word, and do not dabble in Surgery. You would do a favour to all

Cambridge Graduates if you were to mention by name the individual to whom you refer. I am, &c. M.D. CANTAB.

[No name has been given to us.—ED.]

Werdna's letter on the same subject has been received. He seems to have misunderstood our reply given last week. We stated that a Physician at one Institution, who accepted a Surgical appointment in another, would commit an "egregious blunder." We hardly know how we could express disapproval more strongly of a proceeding not directly contrary to the laws of either Institution.

DEATH FROM CHLOROFORM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will some reader be good enough to inform us of the quantity of chloroform administered, and the mode of exhibition in the late fatal case at University College Hospital? I am, &c. M.D.

A QUERY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you be kind enough to inform me if Dr. Marston, who styles himself M.R.C.S., L.S.A., Principal of the Royal Institute of Anatomy, &c., 369, Oxford-street, is a legally qualified practitioner? I am, &c.,
December 14. W. T.

[No Practitioner named Marston appears in the Medical Directory of this year. It is high time that the Medical Council and the Colleges should proceed against every one who induces the public to believe that he possesses diplomas which he really never obtained. Knowing nothing of Dr. Marston, we cannot say whether he is or is not a Member of the College, and Licentiate of the Hall. It is the duty of these bodies to protect their legal members and the public.—ED.]

OXFORD MEDICAL EXAMINATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your leading article on December 7, referring to the "Oxford Medical Education," you tell us "the licence to practise is given with the M.B. degree, as heretofore."

This is a fact of considerable importance to the graduates of the Universities of London, possessing the same degree. By an Act of Parliament passed a few years ago, perfect equality of status and privilege has been granted to graduates of the Universities of London, in respect of corresponding degrees conferred by the Universities of Oxford and Cambridge.

Consequently, the M.B. graduates of London are legally qualified Physicians, in common with their brethren of the sister Universities. Possessing this important right, and that too of very considerable value in actual practice, are not the London M.B.'s entitled to require of the Senate the insertion of words to that effect on the certificates of the Bachelor's degree?

In the next issue of the rules and regulations included in the University Calender, I would suggest the following foot-note in the place of the one already inserted and having reference to the Bachelor Degree:—"The Senate desire it to be understood, that Bachelors of Medicine of the Universities of London, have, on the obtaining that degree, the legal right to practise as Physicians, in common with the graduates of both Oxford and Cambridge."

By this very proper substitution, not only would it be shown to all men the legal standing of their graduates, but it would add considerably to the attractiveness of the M.B. degree, and the very great value appertaining to its possession. Thus, not only conferring a very distinguished honour on the graduate, but conveying to him a legal right to practise as a Physician.

Let the fact be generally known and understood, and I opine that the M.B.'s will be too well satisfied with their degree, and the privilege and distinction it confers, hastily to desire to substitute for it the M.D.

More especially so, as, alas, this once honourable mark of distinction is now being dragged through the mud by multitudes of men in no way worthy of it

Some, to my personal knowledge, who have been plucked at the College of Surgeons,—could not pass the Apothecaries' Hall, and have found it cheapest and most expedient, speed away to the North (more particularly) easily push their way through those Academic portals, thrown open wide, eagerly to embrace them (and the fees), soon to return home full-fledged M.D.'s, and drop thick on Societies—thick?—"Thick as autumnal leaves in Vallambrosa."; I am, &c. J. C. D.

POOR LAW MEDICAL REFORM.

Mr. Griffin requests us to acknowlege the receipt of £11 14s. 6d., being the balance left in the hands of John Galton, Esq., M.B, Treasurer of the Students' Branch of the Poor-law Medical Reform Association. He adds that this is "a donation very acceptable at the present time, as it has enabled me to clear off the debts of the Association so far as I am acquainted with them. In the name of myself and those with whom I act, I beg to thank the students, not only for this money, but for the assistance they have rendered by their meetings, which, in conjunction with other measures caused the members of the House of Commons to institute an inquiry into our complaints; the result we must wait, I must, however, urge upon my brethren the necessity of still continuing their exertion, as nothing but constant hammering will render the hard heart of a poor-law guardian at all malleable."

FEVER AND THE WARM BATH.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—On reading your correspondent's report of Professor Hebra's warm bath practice at Vienna for the elimination and cure of skin disease, my mind reverted to a case of scarlatina maligna, in which the warm bath under the advice of an eminent Physician, used for many days during the worst symptoms, appeared to be of great relief and of use in preventing a fatal termination. In fevers we know the old school used a good deal of tartarised antimony with their other means—the one to act on the skin, and the other to sustain the system. Now as the theory of fever presupposes a poison taken into the blood and occasioning an accumulative process and product, something like fermentation, and so going on until the natural powers are aroused to expel these morbific agencies at every outlet, in order that Nature and health shall again take the place of disease. Are we looking to the skin, like the old Practitioners, as one large outlet to expel the enemy? If the skin be a great depurator, as in the case of the exanthemata, is it not so or may it not be made so in the case of other fevers? and might not the tepid or warm bath be more generally used, every day or every other day, in their progress with gentle drying and rubbing of the whole surface afterwards? I am, &c. SENEX.

"TERATOLOGY."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In two or three late Examination Papers of St. Andrews' University, the Candidate has been required to give the derivation and meaning of the word "Teratology." In forty years of Medical reading I have not once met with this word, save in these papers; the St. Andrews' M.D.'s of my acquaintance cannot tell me where to find it. I therefore ask

1. By what Medical writer is the word used?
2. In what sense, Medically, is it employed?

"Σημεῖα καὶ τέρατα" occur together repeatedly in the New Testament, and are, I think, invariably translated "signs and wonders;" the former being natural appearances, the latter preter- or super-natural, and ominous or portentous.

Semeiology has long been naturalised, but Teratology is, I submit, yet a stranger and alien, requiring formal introduction and ample vouchers before admission as a denizen.

The meaning assigned by Donnegan to the word "τερατολογία" seems scarcely suitable in a Medical sense, viz., a discourse or description of wonders and portentous signs and prodigies. Omens and portents have long ceased to be connected with either normal or morbid phenonema. Probably a St. Andrews' graduate will favour me with an explanation in your columns. I am, &c.

A STUDENT, NOT A CANDIDATE.

SCABIES OR ECZEMA?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your Number for December 14 is a paragraph reflecting upon myself as the late Medical Officer of the Birmingham Workhouse. It is as follows:—

"A skin disease among the pauper inmates of the Birmingham Workhouse has been the object of considerable discussion during several months. It has been surmised that it was itch, but the diagnosis of eczema prevailed. In May last the Guardians submitted the whole question of the sanitary state of the workhouse to eminent referees, and they reported prevalence of eczema, absence of scabies. Mr. Edmund Robinson having been appointed Resident Medical Officer to the workhouse towards the end of October, appears to have acquired the conviction that the disease then prevalent was itch. He examined all the inmates, and noted upwards of 250, which he considered to be well-marked cases of the disease. He first submitted isolated cases to sulphur inunction, and, finding it successful in curing the affection, he organised a system by which the patients are submitted to treatment in large groups during two days. The therapeutic test has been perfectly conclusive of the accuracy of Mr. Robinson's diagnosis, and of the judiciousness of his treatment, and his efforts have been further rewarded by discovering the 'Acarus Scabeii.'"

The two gentlemen alluded to—both men of great reputation and experience—having carefully examined the inmates of the workhouse, stated to the Guardians, in their Report on the Sanitary Condition of the Workhouse, which has been printed, "We found no cases of itch," enumerating the different cutaneous diseases that they did find.

That Mr. Robinson has found *one* acarus I do not doubt, which he carefully showed to a Committee of Guardians, as a proof of the correctness of his assertion that itch was prevalent in the workhouse. But he did not say that the person from whom he had obtained the acarus had been in the workhouse seven days, during which time the disease had not been detected, which it should have been, by Mr. Robinson, on the first day when he was admitted into the workhouse, and, consequently, seen at that time by Mr. Robinson.

As the *post hoc propter hoc* reasoning, that because sulphur inunction cured some cases, therefore the skin disease among the 250 cases was scabies in all, I can only state that, during my absence from the workhouse last July, the gentleman who performed my duty mistook, as Mr. Robinson does, some of the cases of skin disease for itch, and used in such cases sulphur inunction; and though for a few weeks he considered the cases to be cured, yet, without any chance of fresh contagion, the patients again suffered as before.

I am, &c., REDFERN DAVIES.

COMMUNICATIONS have been received from:—
Professor LAYCOCK; Dr. GARROD; Dr. BENCE JONES; Dr. CHAMBERS; Dr. RICHARDSON; Dr. E. LEE; Dr. HAUGHTON; Dr. THOMSON; Dr. PLAYFAIR, St. Andrews; M. DU-BOIS REYMOND; Mr. NUNNELEY; Mr. SOELBERG WELLS; Mr. ARMSTRONG TODD, Mr. PEMBERTON; Mr. HUNTER; Mr. MARSON; Mr. GROSSMITH; Mr. SYMMONS; Mr. STOKES; REGISTRAR-GENERAL.

APPOINTMENTS FOR THE WEEK.

December 21. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 7½ p.m. Mr. Liddle. "On the Defects in the Sanitary Provisons of the Building Act." The President will exhibit Casella's New Minimum Thermometer, and other short communications will be made.

23. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

24. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

25. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

26. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall, "On Light." (Juvenile Lectures.)

27. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

No. 1, 2, 3, is J. Alderman's Patent

Graduating Elastic Spinal and General Invalid Couch, which is fitted up with two, three, or four distinct graduating actions, so that an Invalid can be adjusted imperceptibly to any position without being touched by the nurse, and free from all pressure, that being avoided by his Elastic Ventilating Mattress and his Patent Elastic Adjusting Foundation, so that a patient cannot become bedsore by long confinement.

No. 4, 4, is J. A.'s improved Spinal and General Invalid Couch and Carriage. The Couch has three distinct movements, so that a patient can be placed in any position; it has also a Shifting Stand for the room, upon large easy castors, so that the Invalid can be lifted with the couch from its stand, placed upon the Carriage, and go out for an airing when required, without being touched.

COMFORT FOR INVALIDS
BY HER MAJESTY'S ROYAL LETTERS PATENT

J. ALDERMAN, 16, Soho Square,

LONDON.

No. 5, 5, is J. A.'s Patent Graduating Elastic Self-adjusting Invalid Chair. This Chair, like the Couch, is made to follow Nature in every respect, as the back, the arms, the seat, and the leg-rest are made to work at the same time, so that not a muscle of the patient need be disturbed. The arms are also made to put on and off in an instant, so that the patient can get on and off from either side while the leg-rest is out.

No. 6 is J. A.'s improved Self-propelling Chair, which renders an Invalid perfectly independent, being able to run from room to room without any assistance.

No. 7 is J. A.'s improved Exercising

Horse, which he fits upon a variety of ways, so as to give any amount of exercise.

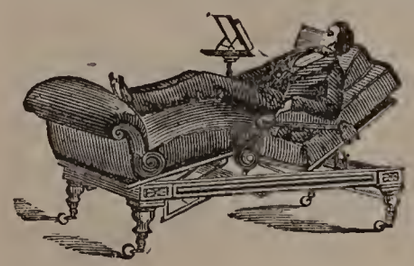
No. 8, 8, 8, is J. A.'s Patent Portable Equilibrium Carrying Chair, which enables an Invalid, however weighty, to be carried up and down stairs with perfect ease and safety; the Chair always adjusting itself, enables the two persons who carry to walk up and down stairs in the usual way, quite erect, with their arms straight down, which avoids any strain upon their muscles. It is also a perfect Easy Chair for the patient to sit in during the day, the carrying handles being made to hook on and off in an instant.

No. 9 is J. A.'s improved Four-wheel Albert Chair, fitted for hand or pony. The body is mounted upon C and under springs behind, and elliptic springs in front, so that it makes a most elegant and easy Carriage, free from all oscillation.

No. 10 is J. A.'s improved Four-wheel Brighton Chair, which is mounted upon C and under springs both back and front, together with his new wrought-iron perches or cranes, instead of the old-fashioned wood perches. It is also fitted for hand or pony, and is the most elegant and easy Carriage in use.

No. 11, 11, is J. A.'s improved Three-wheel Albert Chair, with and without a hood. It is elegant and easy.

No. 12 is J. A.'s improved Three-wheel Garden or Bath Chair, with or without a hood.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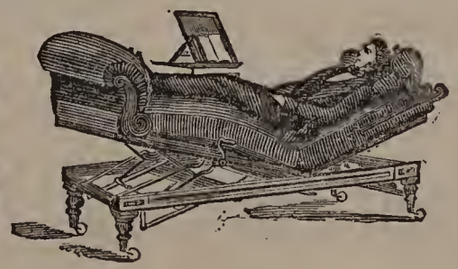
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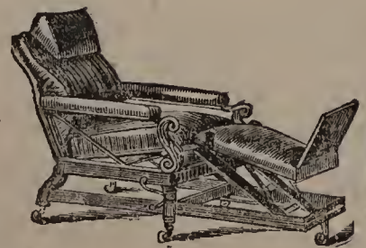
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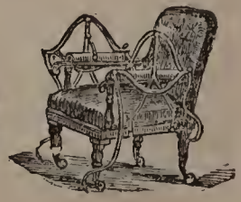
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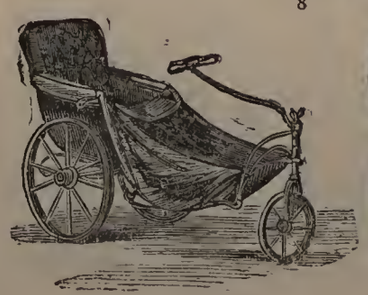
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ORIGINAL LECTURES.

LECTURES
ON THE
PATHOLOGY AND TREATMENT
OF
LATERAL AND OTHER FORMS OF CURVATURE OF THE SPINE.

DELIVERED AT

The Grosvenor Place School of Medicine,

DURING THE SESSION 1860-61.

By WILLIAM ADAMS, F.R.C.S.,

Surgeon to the Royal Orthopædic and the Great Northern Hospitals; Lecturer on Surgery at the Grosvenor Place School of Medicine; Late Demonstrator of Morbid Anatomy at St. Thomas's Hospital, &c.

Lecture VI.
TREATMENT OF LATERAL CURVATURE OF THE SPINE.

Gentlemen,—The treatment of lateral curvature of the spine, if conducted in accordance with the views of the general pathology of this affection which I have endeavoured to establish in these Lectures, must be both constitutional and local in nearly all the cases which occur during childhood and youth. In some few instances in young people the spinal curvature will be found to depend almost entirely upon local causes acting mechanically as described in class 3, in the last Lecture, and in such cases the treatment will be essentially local. In the cases of lateral curvature also requiring treatment at the more advanced periods of life, say from thirty to fifty years of age, or even later,—and which, with few exceptions, are cases in which the spinal curvature, neglected or badly treated during the period of growth when alone a cure can be anticipated, has increased under circumstances of failing health, or in consequence of its own mechanical conditions, such as the disproportionate length of the dorsal to the lumbar curve, or *vice versa*,—the treatment will be purely local, the object being not to cure but to check and arrest the increase of the spinal curvature. But in all other cases the constitutional conditions upon which I have laid so much stress as a causative influence in the production of lateral curvature, will demand a large share of attention, and the treatment of the spinal affection will be successful in proportion as we combine the constitutional with the local treatment.

The constitutional conditions under which lateral curvature of the spine is found to occur have been already described, but may be again enumerated as

1st. General debility which sometimes exists from birth, and favours the production of spinal curvature even in infants from six months to two or three years of age; and in other cases may be induced by febrile and other affections, when it exerts a similar influence during the period of youth and active growth, often leading to the production of spinal curvature in girls from twelve to sixteen years of age.

2nd. An hereditary predisposition to spinal curvature frequently co-existing with a consumptive tendency, a combination of causative influences which we meet with in cases of lateral curvature occurring in girls from seven to twelve years of age, and sometimes later; in such cases the curvature has a marked tendency to increase rapidly, and terminate in conspicuous deformity.

I believe it to be the opinion of those Physicians whose experience is the largest in consumptive cases, that lateral curvature of the spine very rarely co-exists with tubercular disease,—an opinion which would seem to prove that the tubercular diathesis does not favour the production of spinal curvature in any marked degree. The frequency of consumption in the male as well as the female sex, and the infrequency with which lateral curvature occurs in the male sex would also favour this opinion; unless we regard the physical influences under which the two sexes are placed as sufficient to explain this difference, a conclusion which, I think, can hardly be granted to the full extent required by the argument.

A specific, and generally hereditary, predisposition to lateral curvature, is without doubt the condition which can generally be traced, and to which I believe the first importance must be attached; but, co-existing with this condition, we have also very frequently a family history of consumption—one of the parents, or, as in many cases which have come under my observation, several members of the family, having died of consumption—and in several cases of spinal curvature belonging to this class I have known the patient die of consumption. At the same time, in support of the opinion that the hereditary predisposition to spinal curvature is of the first importance, I can state from experience that, in such cases as exhibit this combination of causative influences, when the increase of the spinal curvature has been arrested by mechanical support, combined with constitutional treatment, many patients whom I had thought most likely to die of consumption, judging from their general appearance and family history, have been restored to a good state of health, and have remained so after the lapse of many years, so that the symptoms which most excited alarm must be viewed as having depended largely upon the spinal curvature.

When the constitutional conditions which I have described exist either singly or in combination, they must greatly influence our views as to the treatment to be adopted, and must be regarded as sufficient to negative some methods of treatment, such as complete recumbency, by which I mean lying down for one or two years, which would only more completely exhaust the constitutional powers of the patient; and also gymnastics, when employed as a system of strong muscular exercises, which only fatigue the patient without improving the spinal curvature. A combination of lying-down to the extent of four or six hours a-day, together with light gymnastic exercises, is the treatment best adapted to such cases at the commencement of the spinal affection, when curvature is threatened rather than positively formed; but if curvature has actually taken place, then mechanical support must be combined with the partial recumbency and light gymnastic exercises.

The Constitutional Treatment in these cases must be regarded as at least of equal importance with the local treatment, and every effort made to improve the general powers of the patient. For this purpose, I have found the free exhibition of the hypophosphite of lime, and preparations of iron the most useful. Generally I direct five grains of the lime to be dissolved in a wineglassful of water, to which ten drops of the Kæ. ferri sesquich. may be added, and taken twice a-day, at, or directly after, meal times. In addition, also, I give half-an-ounce of cod-liver oil, to be taken twice a-day, an hour after meal times, and recommend the use of wine or beer, as the patient may prefer. The influence of soil and place of residence is also of the greatest importance, and, where practicable, I advise the removal from large towns, damp situations, and clay soils, to high and dry situations, on a chalk soil. The great improvement in the general health and strength of delicate children and growing girls with spinal curvature, which I have seen follow a change of residence from such counties as Lincolnshire, Cornwall, Devonshire, etc., to high and dry situations on chalk hills or downs, has led me to recommend such a change of residence in these cases where practicable. To these measures we may also add the use of the cold bath where it can be borne, followed by frictions to the back, and free out-door exercise.

The Local Treatment of lateral curvature of the spine is that to which the attention of the Profession has been generally—I might almost say exclusively—directed; and at different periods various methods, or so-called *systems of treatment*, have sprung into existence, through the advocacy of those who have specially devoted their attention to the treatment of this class of affections; and each *system* in its turn has more or less completely enjoyed the support of public opinion, and the sanction of the Profession.

I have already enumerated, in the first Lecture, the most important of these systems, or those which have received the greatest weight of authority, and will now again advert to them in reference to the anatomical and pathological principles upon which they are based, and examine how far these are compatible with the views which I have brought forward in these Lectures in reference to the anatomical construction and mechanism of motion of the spinal column, and the pathological conditions which I believe will be found to exist in every case of lateral curvature, however slight. We have, then:—

1st. The system of *complete recumbency*.

2nd. The system of *muscular exercises, or gymnastics*.

3rd. The system of *cutting the spinal muscles.*

4th. The system of *mechanical extension,*

5th. The system of *mechanical treatment by support and pressure,* applied by means of spinal instruments.

All these different systems, acting for the most part on principles diametrically opposed to each other, are reported to have been in every way successful and satisfactory in effecting the cure of lateral curvature of the spine; and the perusal of the various works or treatises in which these systems have been advocated, serves only to impress one with the conviction that lateral curvature of the spine has even at the present time, no fixed pathology; and therefore no fixed principles of treatment have as yet been determined.

1st. The system of *complete recumbency,* by which patients used to be condemned to constant lying down for at least one or two years, and frequently for a much longer period, has had many advocates in this country; but its injurious effects upon the general health, as well as its complete failure to cure the spinal curvature when severe, has led to its discontinuance as a system; and its admitted disadvantages have been so loudly proclaimed by the advocates of other systems, and more especially by those who profess to cure even severe cases of spinal curvature by means of spinal instruments, that the advantages which undoubtedly belong to recumbency when judiciously employed, and combined with other means, have been to a great extent lost to the public of late years, and the treatment of spinal curvature proportionably less successful than it might have been if the views taken of its pathology and treatment had been upon a more enlarged and liberal scale.

The great object of recumbency is to relieve the spine from the superincumbent weight of the head and upper extremities, which it is obviously unable to support when curved or even disposed to curvature; and as the immediate cause of curvature of the spine is undoubtedly mechanical in its nature and action, viz. the irregular distribution of the weight of the head and upper extremities, though this again may depend, as it generally does, upon a combination of local and constitutional causes, yet the immediate object is most completely effected by the patient assuming the recumbent position. All the mechanical conditions upon which lateral curvature so much depends are thus removed, and the patient, during recumbency, relies upon her constitutional strength and powers of development and growth, which are, in many instances, sufficient, during the period of youth, to lead to the complete reparation of such structural damage as the intervertebral cartilages and oblique articulating processes may have sustained when the curvature is slight and of recent formation. I regard lying down, therefore, during the period of active growth, as essentially a curative means in cases of spinal curvature, and whilst I reject it as a system to be relied upon exclusively in any class of cases, I recommend its adoption in every case during the period of growth, in conjunction with such other means as may be thought advisable; in some instances with gymnastic exercises, and in others with mechanical support, occasionally also in conjunction with both these methods of treatment; and here I would observe that there is no greater error than to suppose that these different methods, or so-called systems of treatment are essentially incompatible with each other. Their objects, it is true, are very different, yet both theory and practice teach us that in many instances they may be most advantageously combined for the benefit of the patient. As a general rule, I advise recumbency in proportion as the spinal curvature predominates in the lumbar region, in which situation it must be admitted that mechanical support can be of little use; here there are no ribs against which pressure can be exerted, and no one will contend that the transverse processes are adapted to receive mechanical pressure.

With regard to the extent to which I recommend lying down, I would observe that in ordinary cases I advise recumbency at least during four or six hours a-day; and this can be borne with comfort and without any disadvantage to the general health, if the patient use the reclining chair represented in Fig. 1.

The inclination of this chair can be varied to any angle from that of an upright chair to a horizontal couch, but the angle of 45°, or rather more, as represented in the woodcut, is that best adapted to long-continued recumbency for spinal cases. In this position the weight of the head and upper extremities is effectually removed from the spinal column; and the

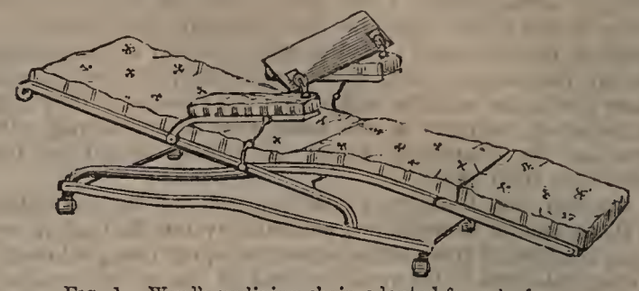

Fig. 1.—Ward's reclining chair adapted for spinal cases.

patient does not suffer any of the inconveniences, such as headache, indigestion, etc., so frequently attendant upon lying down on the *inclined plane,* or lying flat upon the floor, or upon boards, which formerly used to be recommended. The addition of arms and a reading desk to the chair adds materially to the comfort of the patient, and allows education in its more important branches to proceed without interruption. This chair has been made for me for several years by Mr. Ward of Leicester-square. Writing, drawing, and music must be diminished in the education of young ladies under treatment for spinal curvature, as the long continuance either of the sitting or standing positions is that which we have more especially to avoid.

2nd. *The system of muscular exercises, or gymnastics,* as a curative means in the treatment of lateral curvature of the spine, has been relied upon with more confidence by Continental than English Surgeons; and according to the statements made by the leading Professors of this system, lateral curvature is certainly cured when the deviation is slight, and as certainly arrested when more severe; hence it is assumed to be at least equal, if not superior, to other methods of treatment. The pathological idea upon which this system is based is that lateral curvature essentially depends upon muscular debility, and the argument therefore is—if muscular debility be the cause, will it not be desirable to strengthen the muscles by means of a proper system of gymnastic exercises? rather than apply mechanical support, which must, by superseding the necessity for muscular effort, tend to weaken the muscles to a corresponding extent; or than to adopt a system of lying down, which would still further debilitate both the system and the spinal muscles. The argument is logical and attractive enough both to the public and the Profession, who generally adopt the muscular-debility theory of the production of lateral curvature; but there can be no doubt that this theory can only apply to a limited number of cases. I have already stated that certainly less than half of all the cases of lateral curvature which have passed under my observation, have been neither preceded nor accompanied by any muscular debility, and that even where muscular debility has existed, other causes, both constitutional and local, have also existed, and according to the views of the mode of production and general pathology of lateral curvature which I have adopted, appear to me to be of not less importance than the condition of muscular debility.

Let it be admitted, however, that in many cases an increase of muscular strength is desirable, and the question which naturally follows is—can this be so obtained as directly to cure, or to contribute to the cure of lateral curvature of the spine?—If in any case of lateral curvature, all the muscles of the spine could be at once raised to their maximum of power, the only effect could possibly be to arrest the curvature at that point, and we frequently see cases of moderate severity undergo spontaneous arrest where the general health and muscular power are improved, though I believe this only occurs when the mechanical conditions of the curvature—more especially the equality in length of the dorsal and lumbar curves—are favourable to such a result; but in such cases no advance is made towards straightening the crooked spine, which must be considered the main object of treatment. A general increase of muscular strength being thus considered useless as a curative means, it may be asked, Cannot we by special muscular exercises develope only the muscles which would tend to correct the spinal curvature? By the gymnastic professors it will doubtless be contended that we can, but I have no confidence in the curative effects of any system of special muscular exercises, whereby the muscles on one side of the spine are sought to be particularly developed. I believe such a result to be practically impossible for two reasons, 1st. The anatomical difficulty, arising from the number and

complex arrangement of the spinal muscles, of stating precisely in any given case the exact muscles and portions of muscles, the increased power of which would act beneficially on the curvature. 2nd. The impossibility of strengthening these particular muscles and portions of muscles, if they could be selected, without at the same time strengthening other muscles the increased action of which would at least neutralize their effect.

Another, and I believe a fatal objection to the pretentions of the muscular exercise or gymnastic system is, that it rests upon the idea of free motion or surface-play being allowed at the articulations of the vertebræ, and an absence of structural changes in the articular surfaces;—in fact upon the idea of the anatomical analogy between the articulations of the vertebræ, and the moveable articulations of the extremities, and consequently upon the idea of an analogy in the pathological conditions attending the distortions of the spine and those of the limbs, whereas I have endeavoured to prove that there is a complete absence of any analogy between the vertebral articulations and the moveable articulations of the extremities; and that no curvature, however slight, can exist without structural changes affecting the intervertebral cartilages and the oblique articulating processes in a degree proportionate to the curvature.

The muscular exercise, or gymnastic system, must therefore be rejected as a system capable of curing lateral curvature of the spine; but nevertheless when used judiciously, and in conjunction with other means, in some cases of slight lateral curvature, associated with muscular debility, there can be no doubt of the great value of a well regulated system of gymnastic exercises. In cases of *weak spine* which threaten to pass into actual curvature, cases which I sometimes speak of as *threatened curvature*, occurring in girls from twelve to sixteen years of age, gymnastic exercises are invaluable, and in conjunction with the use of the reclining chair for about four hours a-day, may be confidently relied upon, as the best *preventive* means at our command, the general health at the same time being improved by such constitutional means as may appear to be indicated. In cases of slight curvature also, I employ gymnastics in combination with partial recumbency and mechanical support by the lightest form of spinal instrument, such as the Eagland belt, and now from long experience I am enabled to state that this combination of means contributes to a favourable termination much more certainly than the employment of either system alone. The gymnastic exercises which appear to me to be the best adapted for strengthening the spinal muscles equally on both sides are those used by means of the *hand-swing, the elastic chest expander, and the act of drawing up a weight from the ground*, which may be imitated by a short and strong cord of vulcanized India-rubber attached to the ground. This is the movement of the *top sawyer* at the saw-pit. More varied exercises may also be employed, but essentially these appear to me to be the most useful.

3rd. The system of *cutting the spinal muscles*. In direct opposition to the idea of muscular debility and the treatment by gymnastic exercises, we have the theory of M. Guérin, that lateral curvature of the spine is produced by the active or tonic contraction of some of the spinal muscles, in the same way that club-foot, wry-neck, and various contractions of the limbs are known to be frequently caused; and upon this pathological idea M. Guérin has recommended, and for many years extensively adopted, the practice of dividing the spinal muscles. The operation, however, I am happy to say, has found but few advocates in France, and still fewer in England. I have already discussed at some length, and I hope have succeeded in showing, the fallacies upon which this theory is based. It is unnecessary, therefore, for me to say more in reference to the practice arising out of it, viz., the section of the spinal muscles, than that I entirely disapprove of the operation, and regard it essentially as an unsound and unscientific procedure; and that I do not believe there are any cases of lateral curvature in which such an operation can ever be called for.

4th. The system of *mechanical extension*. The idea of straightening a crooked spine by the process of stretching it, is of ancient date; and the system of mechanical extension, employed both in the erect and the recumbent positions, has been very generally adopted throughout the Continent, and is still in vogue to some extent. In England, also, the practice was in favour twenty years ago, but never so generally adopted as in France and Germany. I have never seen the *extension plan* in operation, but not long since I saw in a private establishment near Portman-square, several *extension couches*, and also a sort of hanging contrivance, by which people were drawn up by the head, off the ground, and allowed to remain suspended in the air for a certain time. I was informed, however, that these things were not used in the treatment at present adopted, which was essentially gymnastic. The couches were divided transversely in the centre, and the two halves could be separated by machinery when the patient was fixed on to it by straps, etc., the head and upper extremities being fixed to one half and the legs to the other. Our anatomical knowledge at the present time, and a momentary consideration of the series of adapted structural changes which we know takes place in all cases of confirmed lateral curvature, render it unnecessary for us to discuss any pretended merits assumed for the *mechanical extension* system.

5th. The system of *mechanical treatment* by means of spinal instruments. The idea of straightening a curved spine by means of mechanical contrivances fixed on the body, and constantly worn by the patient, without the necessity of lying down, and by what are described as *portable instruments*, acting on the same principle as we now adopt in straightening a bent knee-joint, for instance, is of modern invention, and may be described as the English orthopædic treatment of the present day, since it is the plan which has been advocated and adopted by the majority of the English orthopædic authorities during the last twenty years to the exclusion—and it may be feared injuriously—of all other methods of treatment.

The English public as well as the Profession, had seen the very satisfactory condition of the treatment of lateral curvature of the spine by the *system of recumbency;* and the general advance in the construction of orthopædic instruments for the cure of club foot, etc., led gradually to the improvement of such portable contrivances for supporting the spine as had been previously employed by Tavernier and others.

Time will not allow of my discussing the merits of the various instruments now in use; they vary considerably in their principles of construction as well as in the mechanical details, and the kind of apparatus to be used in any particular case must depend upon the form and situation of the curve, and also upon the age of the patient. In delicate girls with slight curvature I find the lightest form of instrument such as that well known as the *Eagland belt* quite sufficient, and this instrument has been strengthened and otherwise improved in its construction for me by Mr. Blaise, of St. James'-street, but in many cases a much more powerful instrument is necessary, and a second plate must be added.

There can be no doubt that the greatest advance which has taken place in modern times in the treatment of lateral curvature of the spine has been made through the *system of mechanical treatment* by means of spinal instruments; but as might have been anticipated from the novelty and importance of the system, too much has been expected from it, and also too much claimed for it by its principal advocates. Compared with other systems, there can be no question as to the superiority of the mechanical treatment, and if one system alone was to be adopted, this would be most entitled to our confidence, but the evidence which I have laid before you of the constitutional as well as the local causes which contribute to the production of spinal curvature; and the nature of the structural changes which occur even in slight cases of lateral curvature, must prevent our placing sole and implicit confidence in the power of any spinal instrument to cure the curvature. I have no hesitation in stating that it is impossible to straighten a curved spine by any mechanical means in the same manner and upon the same principle as we can straighten a bent knee, ankle, or any other moveable articulation; but in combination with other means, such as partial recumbency, and in some slight cases with muscular exercises, it is quite possible to cure a curvature of the spine when slight and of recent formation in young persons; and it is certainly within our power most effectually to arrest the progress of curvature when more severe.

CHOLERA AMONG THE HOGS.—The *Wayne* (New York) *Press* states that the disease termed "Hog-cholera" is raging among the porkers at the distilleries in Clyde. One man lost something like 1200 hogs a short time since, the hogs dying at the rate of 60 or 100 a-day.

ORIGINAL COMMUNICATIONS.

A CASE ILLUSTRATING THE BENEFICIAL EFFECTS OF ELECTRICITY IN CERTAIN FORMS OF PARALYSIS OF THE MUSCLES OF THE EYE.

By SOELBERG WELLS, M.R.C.S. Eng., M.D. Edin.,
Clinical Assistant to Mr. Bowman at the Royal London Ophthalmic Hospital (Moorfields), etc., etc.

Although electricity is acquiring more and more repute in this country as a therapeutic agent, its employment in paralytic affections of the muscles of the eye is at present but too infrequent with us. The following case illustrating the great benefit to be derived from its use, together with a few remarks upon its mode of application, and the class of cases in which it is particularly indicated, may, therefore, not prove uninteresting to the Medical Profession at large :—

On May 15, 1861, I was called in consultation by my friend, Mr. Crosse, of Norwich, to see Mr. P——, a patient of his, who had been suffering some weeks from a paralysis of the external rectus muscle of the left eye, which was soon accompanied by an evident inward squint of the same eye. The patient was a gentleman, about 25, of a florid, healthy complexion, but of a somewhat strumous diathesis. In the previous December he had had measles. In March (1861) he first complained of diplopia, and Mr. Crosse at once diagnosed paralysis of the external rectus of the left eye. This diplopia gradually increased in extent, greatly annoying and confusing the patient, who was almost incapacitated from writing, etc. ; the squint also became more and more apparent. During March and April, alteratives, leeches, and blisters were prescribed ; in the beginning of April he commenced to take iodide of potassium.

On my first seeing him (May 15) he presented the following symptoms :—

Movements of the Eyes.—The movements of the right eye were normal in every direction, although they were to a very slight extent limited directly inwards and directly outwards, but this limitation was so very slight that *per se* it could not be looked upon as abnormal. The movements of the left eye were perfect in every direction, except directly outwards, and in the diagonal direction upwards and outwards, and downwards and outwards. This eye could be moved further inwards than the right. It could be moved slightly outwards (to the extent of about three-quarters of a line) ; this outward movement was not due to the combined action of the superior and inferior oblique muscles, for it was not zig-zag or rolling, but a continuous horizontal movement, showing that the abductor was not quite paralysed.

When both eyes were open, and the patient directed to look at an object (a lighted candle) held in the median line at a distance of eight feet, a slight inward squint (of about one line) of the left eye was at once noticeable. This squint became greater in extent the further the candle was moved to the left of the patient, for whilst his right eye followed it, his left lagged more and more behind (on account of the paralysis of its abductor), and consequently the convergent squint must increase more and more in this direction, the double images becoming at the same time further apart. When the candle was moved to the right of the patient, the squint became less and less, until it completely disappeared (as also, of course, the diplopia) when the object was brought two-and-a-half feet into the right half of his field of vision. Two interesting phenomena (of diagnostic importance) were noticed when the candle was held slightly to the left. 1st. If the right eye was then covered with the hand the left moved slightly outwards to fix the object, the covered right eye making an associated inward movement ; but this movement was considerably greater in extent than the outward movement of the left eye. 2nd. If the patient was told to strike quickly at the candle (which was brought nearer to him for this purpose) with his hand, he invariably missed it by going to the left of it.

Diplopia.—In order to examine the double images, we should place an oblong slip of red glass before the right eye, Our object in doing so is twofold :—1st. We enable the patient to distinguish the images by their colour. 2nd. We lessen the intensity of the image of the sound eye and approximate it to that of the affected one, whose image, owing to the rays from the object not falling upon the yellow spot, but upon an eccentric portion of the retina, will be less intense in proportion to the distance of the spot upon which the rays fall from the yellow spot. On looking at the candle held at a distance of eight feet in the median line, the patient saw two images, one red (belonging to the right eye) the other yellow (left eye). They showed no difference in height, nor did one slant ; they stood beside each other and were homonymous, *i.e.*, the red image belonging to the right eye was to the right of the patient, the yellow belonging to the left eye was on his left. The reason of this will be easily understood ; the rays from the candle fall in the right eye upon the yellow spot, and the image is projected back to the place occupied by the object, but in the left eye (owing to its deviation inwards) they do not fall upon the yellow spot, but upon a portion of the retina internal to it, and the image is consequently projected outwards, to the left of the patient. The further the candle was moved to the left, the greater was the distance between the double images. When it was moved back again towards the right, this distance gradually decreased, until the diplopia completely ceased, when the object was held two and a-half feet in the right half of the field of vision. In the diagonal position upwards and outwards, and downwards and outwards, the images showed not only lateral differences, but also differences in height, and one slanted. To explain this would, however, lead us too far, and I must therefore refer the reader to my papers upon Paralytic Affections of the Muscles of the Eye, published in the Ophthalmic Hospital Reports, Nos. 8 to 12.

Diagnosis.—From the above symptoms, I came to the conclusion that there was paralysis of the external rectus muscle of the left eye, with secondary contraction of the internal rectus of the same eye. My reasons for this opinion were as follows :—The paralysis of the left abductor was proved by the want of mobility outwards of the left eye, by the disproportion between the movement outwards of this eye to fix an object (the right eye being covered), and the considerably greater inward associated movement of the right eye. This disproportion can only occur in cases of paralysis, for in common squint, the secondary angle of squinting equals the primary, *i. e.*, the inward associated movement of the covered eye would correspond in extent with the outward movement of the squinting eye, whereas in our case it is not so, for the secondary angle of squinting is greater than the primary. Again, the paralysis of the abductor is proved by the phenomenon of the patient's inability to hit the object (the right eye being covered) when he strikes quickly at it with his hand. As some of my readers may not quite understand the reason of this, I will give, in explanation of it, an extract from my above-mentioned papers (Ophthalmic Hospital Reports, No. 9, p. 136) :—

"If we close the right eye and tell the patient to strike with his finger quickly (if he does it slowly he will have time to correct his mistake), at an object held somewhat in the left half of his field of vision, he will miss hitting it, by going too much to the left ; for the insufficiently innervated abducens demands, in order to bring the eye into the required position, as strong a contraction impulse as would, in a normal state of the muscles, effect a far greater amount of movement, therefore the patient at first, over-estimating the amount of contraction, believes the object to lie more to the side of the paralysed muscle than it in reality does, and consequently aims too much to the left of it. In time, however, if the paralytic affection be not too complicated, patients learn to correct these errors. The dizziness frequently complained of by them, is not necessarily owing to any cerebral lesion, but is due generally to the confusion which arises from the difference between the real and imaginary position of the object."

The nature of the diplopia also pointed to a paralysis of the left abductor muscle. It was homonymous, showed only lateral differences (except in the diagonal position, outwards,) and the differences in the double images increased the further the object was moved to the left.

The second portion of our diagnosis—the secondary contraction of the left internal rectus muscle—was proved by the following facts :—1. By the convergent squint of the left eye, which existed not only when the patient looked at an object at eight feet distance, held in the middle line, but which extended even two and a-half feet into the right half of the field of vision. Now, if it had only been a simple, uncom-

plicated paralysis of the left abductor, both optic axes should already have been fixed upon the object when it was held in the middle line. 2. The diplopia, which did not cease at the middle line, but corresponding to the squint, extended two and a-half feet into the right half of the field of vision.

Let us now consider the cause of the affection. This appeared to be peripheral, *i. e.*, not dependent upon causes within the cranium, for there was no impairment of the mind, or of the sense; his memory was good, and there was no other impairment of mobility in any portion of the body. And in the total absence of any symptoms of pressure, etc., upon the sixth nerve, within the orbit, I presumed that the paralysis was most likely due to rheumatism; this being a very frequent cause of these affections, more especially during cold and wet weather, and I therefore gave a favourable prognosis, more especially as the paralysis was not of long standing. I, however, warned the patient that although the paralytic affection might be cured, some secondary contraction of the opponent and consequent convergent squint might remain, and demand an operation.

Treatment.—As the affection had gradually progressed even under the skilful treatment of his Medical attendant, I naturally looked about me for some other plan of treatment, in the hope that this might prove more successful. As I had seen electricity very much employed in Von Graefe's clinique in paralysis of the muscles of the eye, dependent upon peripheral causes, and had seen many admirable results from its regular and prolonged employment, I determined to try its effect in this case, and am happy to say that it rapidly effected a cure. The iodide of potassium was continued till June 13, but I do not think that the favourable turn the disease assumed was due to the action of this remedy which had before the application of electricity proved unavailing even to arrest the affection. In order to free the patient from the annoyance of the diplopia, I directed the left eye to be covered, the prisms required to unite the double images being too strong and clumsy to wear—(16° for reading, 32° for distance.)

June 30.—I saw him again—he is greatly improved, the inward squint is reduced to about a-quarter of a line, and corresponding to this the diplopia extends only five inches (instead of two and a-half feet) into the right half of the field of vision.

August 2.—Met him in the street, not the slightest inward squint, except on looking far to the left, is not at all annoyed by diplopia except in the same direction, but can follow his professional duties, read, write, etc., without any inconvenience. Left off electricity July 15.

September 3.—The mobility outwards of left eye almost normal. No convergent squint until the object (held at eight feet distance) is moved four feet into the left half of the field of vision when diplopia arises. I wished him to resume the electricity in order that the affection might be completely cured, but he had no opportunity of doing so, and I therefore ordered him to practise the left abductor by means of a prism of 5° with its base turned inwards.

November 12.—The mobility outwards has increased a little more, the outer edge of the cornea can be almost brought to the outer canthus. The convergent squint and diplopia now only arise when the object (still at eight feet distance) is brought five and a-half feet into the left half of the field of vision. The patient considers himself perfectly cured.

The electricity was at first applied for five minutes daily, by Mr. Crosse, and this time was gradually extended to twenty minutes. One electrode, covered with moistened sponge, was applied to the skin of the closed eye exactly over the paralysed muscle, the other electrode was placed on the temple. One of the rotating magneto-electric induction machines was used.

Electricity certainly answered better in this case than I expected, for not only was the paralysis of the external rectus all but cured, but as this muscle increased in strength, the secondary contraction of the internal rectus was gradually overcome and the squint disappeared, had the electricity been continued but a few weeks longer, I firmly believe that the paralysis would have been *completely* cured, the patient, however, felt no annoyance from the slightly remaining paralysis, and therefore really did not care much about resuming the treatment. I may be met by the opinion that the iodide of potassium, and not the electricity, produced the benefit, but how is it then that under its use the patient got no better? as soon, however, as electricity was applied, the improvement commenced and gradually and steadily continued.

Electricity is indicated in paralytic affections of the muscles of the eye dependent upon peripheral causes, its action is especially marked in cases produced by rheumatism.

In conclusion, I must warn the reader against ever using the *continuous* current in applying electricity to the eye, on account of its deleterious effect upon the retina; we should therefore always employ the extra current of an induction machine, using either a magneto-electric or volta-electric apparatus; each has its advantages, for a full consideration of which I must refer the reader to books on electricity, more particularly to Dr. Althaus's excellent work on Medical Electricity.

16, Savile-row, W.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.

Assistant-Physician to the Metropolitan Free Hospital.

EDINBURGH ROYAL INFIRMARY.

CONTRACTION OF THE MITRAL VALVE—HYPERTROPHY OF HEART—HEMIPLEGIA ON LEFT SIDE—HEMIPLEGIC ŒDEMA—CLOT IN LEFT VENTRICLE—OBSTRUCTION OF MIDDLE CEREBRAL ARTERY ON RIGHT SIDE.

(Under the care of Professor LAYCOCK.)

[Reported by Dr. JOHN SIMPSON.]

M. A., aged 30, a servant, admitted October 23, 1861. The patient states that, five years ago, while in good health, she had shivering, followed by cough, difficulty of breathing, and palpitation. She was able to continue her work except in winter, during foggy weather. Besides these symptoms she frequently had pain in the lower dorsal region, and eating of butcher's meat always caused vomiting. Otherwise her appetite was good. These symptoms had troubled her more and more every winter. Three weeks ago the cough and palpitation became severe, and the appetite more impaired than before. Her nights were sleepless, and two days ago swelling of the legs came on. She had not been temperate in her habits, and had had an illegitimate child about a year ago

State on Admission.—Face congested; lips of a livid blue colour; countenance expressive of suffering; superficial veins of the neck tinged and pulsating; extremities cold. There is slight œdema of the hands, which are almost cadaverous in coldness; the feet and legs are œdematous. She complains of pain in the region of the heart, palpitation, headache, and dyspnœa; she has not slept for several nights; mental faculties clear. The tongue is coated with a whitish-brown fur. Her appetite is good, and she has vomited her meals for some days; the bowels are regular. On examining the thoracic regions, the cardiac impulse was diffused, irregular, and tumultuous. On auscultation, the first and second sounds could scarcely be distinguished from each other. A blowing murmur was heard occasionally with the first sound, at the apex, not heard at the base. The transverse cardiac dulness could not be determined, owing to the dulness at the base of left lung. Pulse scarcely perceptible at either wrist, very irregular, 96 per minute. Pulmonary symptoms and physical signs those of consolidation at bases of the lungs. She complains also of severe pain in the back and loins. Menstruation is regular, and she has been taken ill to-day at the usual time. Urine sp. gr. 1020, of a dark red colour, contains a small amount of urates, not scanty, no albumen. On admission she was ordered—1. Dry cupping, between the scapulæ, to be followed by turpentine epithems to thorax. 2. Warmth to the extremities. 3. Wine ʒiv., and at night a draught containing æth. sulph. ʒss., sol. mur. morph. mxv. 4. Strong

beef-tea to be given at regular intervals. Under this treatment, which was continued, she improved slowly up to the 27th inst., when the dyspnœa still continuing urgent, an attempt was made to relieve her by a small bleeding from the arm. It failed, probably from the feeble circulation in the arm and the difficulty of getting the vein to rise. The dyspnœa was, however, mitigated by sulphuric ether.

October 30.—Vomiting occurred to-day, which was arrested after the use of hydrocyanic acid with aromatic spirits of ammonia and compound tincture of cardamoms.

November 6.—Œdema observed to be on the increase. The legs, thighs, abdomen, and lumbar regions are very œdematous. Still no albumen in the urine. No signs of peritoneal effusion.

10th.—A slight trace of albumen in the urine was detected.

16th.—Œdema on the increase. Skin of legs white, tense, and shining. Albumen more evident in the urine, which is still freely passed. Dr. Laycock to-day made a longitudinal incision through the integuments over the malleolus of left ankle, and some lancet punctures in the right.

At 3 p.m. a sudden change took place in the patient's condition. She was found sitting up in bed, leaning to the left side. The muscles of the right side of the face were strongly contracted, the eyes were closed, and the mouth dragged to the right side. When asked to protrude the tongue, she did so, inclining it to the left side. She could not articulate distinctly. At first she seemed but partially conscious, according to the nurse's statement, but in a few minutes regained consciousness entirely. She complained of pain in the right side of the head over the parietal eminence. She was completely unable to move the left arm and was able to move slightly the left leg. The sensibility as ascertained by pinching was unimpaired in the left side. The œdema in the left arm was so much increased that the pulse could not be felt till pressure for a few seconds had removed the swelling over the artery. Pulse in the right arm very feeble, 70 per minute. Cupping glasses were immediately applied to the nape of the neck, and an enema of turpentine and castor oil administered. She had also ʒss of brandy with hot water and sugar, and in the evening a blister was applied to the nape of the neck, and the brandy continued in small quantities during the night.

17th.—The breathing has become much more laboured. The motion of the left side of the chest is very defective, and she has considerable difficulty in swallowing. Urine contains a copious sediment of lithates. Albumen not much increased.

18th.—She is still conscious, but the sensibility of the left side is gone. From this date till her death, she grew gradually worse, the breathing became stertorous on the supervention of coma. Urine and fæces were passed involuntarily, and she died on the 20th at 9 p.m. The œdema, before death, had almost disappeared from the right leg, while the left leg was very much distended.

Sectio Cadaveris on the 21st, 1 p.m.—The body was that of a large, well-developed woman. There was considerable subcutaneous fat. Œdema was well marked on the left side.

Thorax.—On opening the thorax, a large extent of pericardium was exposed. The visceral and parietal layers of pericardium were adherent at the apex by a firm fibrous band. The heart, especially the right side, was gorged with blood. In addition to the soft, loose, unattached clots, adherent clots were found in both sides of the heart, and near the apex of the left ventricle was a globular clot about the size of a large filbert, of a brownish red colour, and adherent to the columnæ corneæ. It was softened in the centre. The appendix of the left auricle contained a similar clot as did the right auricle and ventricle. The aortic valves were incompetent. The posterior valve was of natural size, the other two, but especially the left valve, was shortened. All the valves were somewhat thickened, and adhering to the margins of each was a little organized fleshy growth. The mitral orifice was contracted; its edges were thickened, and there was a little glueing together of the chordæ tendineæ, which, however, were but little shortened. The mitral orifice admitted little more than one finger. Its diameter was ·72 inches, corresponding to a circumference of 2·26 inches. The diameter of the tricuspid orifice was 1·6, its circumference 5 inches. The left ventricle was dilated, the walls being about the normal thickness. The right ventricle was a little dilated and hypertrophied. The heart weighed sixteen ounces. There were adhesions of both lungs, most extensive on the left side. The lungs were somewhat congested and œdematous. There was great congestion of the bronchial mucous membrane.

Abdomen.—The liver was moderately firm, presenting the nutmeg condition. The spleen was pretty firm and congested, as also the kidneys. There was congestion of the cæcum.

Head.—The membranes of the brain were quite healthy, the lateral ventricles contained little fluid. The corpora striata, as seen in the ventricles, were examined and found healthy. On examining the base of the brain and the vessels, there was found to be obstruction of the middle cerebral artery in the right fissure of Sylvius at the point where the artery divided into its branches, which were three in number. It was caused by a clot ·2 inches long which presented precisely the character of the clot found in the left ventricle of the heart. In one of the branches into which the artery divided was a loose, black, secondary clot fully half-an-inch long. There was softening of the adjoining substance of the brain, which on section was found to extend inwards, so as just to affect the outer and lower border of the right corpus striatum. On microscopic examination, the softened cerebral matter was found to contain much granular matter and a few "compound granular corpuscles."

Abstract of Clinical Lecture.—Professor Laycock, in commenting on the case, observed that it was one in which there was no difficulty as to the diagnosis. All the cardiac and thoracic symptoms were characteristic of the cardiac lesions. Nor was the prognosis at all less doubtful. The lesions were of a character which no remedial means could touch. All that could be done was to secure a partial relief of the patient's sufferings.

The chief practical interest lay in the history of the case, and in the inquiry whether at any time the morbid changes in the cardiac valves which finally led to death could have been detected, their nature ascertained, and means adopted to check their progress. Now the patient was naturally a remarkably vigorous, powerfully-built woman, but of a diathesis which predisposes to morbid changes in the serous and sero-fibrous tissues, upon the application of the exciting or predisposing causes. The commencement of the disease dates clearly from a period of five years, when she probably had an attack of diathetic endocarditis, that left behind it a tendency to endocardial degeneration. This, as shown by the examination after death, was of the kind termed fibroid, and which is perhaps the most common kind in this class of cases in which rheumatic lesions of the heart occur without articular symptoms. This is a well-marked class of cases, the leading points in which are that the fibroid degeneration slowly advances from year to year with constant ingravescence of the symptoms, and the implication of other important viscera consecutively. Had the patient lived long enough, she would finally have had fibroid degeneration of the kidney. Probably the leading exciting causes of the diathetic affection are to be found in her sensual habits, sexual and alcoholic, and which are usually strongly developed in persons of her constitution.

Dr. Laycock said that two classes of changes arose in the course of the disease, which tend to shorten life—namely, the overwhelming anasarca, and the formation of clots in the heart and arteries. "The course of the anasarca indicated what I have often pointed out to students, namely, the intimate connexion between anasarca and the innervation of blood-vessels. The œdema of the lower extremities supervened three weeks before admission, when menstruation was approaching; this was ingravescent just before she was admitted, when on the point of menstruation, and it was finally again ingravescent when the menstrual change was approaching for the third time, and she died just twenty-eight days after the last menstruation. The consideration of these coincidences would lead us to inquire into the state of the nervous system at each menstrual period, for which we have not time, but you have in the hemiplegic œdema a striking and palpable illustration of my doctrine, that œdema and anarsaca are by no means so mechanically produced as is usually supposed. Previously to the hemiplegia both legs, as we all saw, were enormously swollen, but subsequently thereto the right leg and thigh gradually became smaller, until the calf of the leg hung loosely and shrivelled as it were, while, on the hemiplegic side, the œdema remained unchanged in the lower extremity, and increased greatly in the upper. Now, you have not, in this case, so simple a problem as appears, for it is clear that the same cause which led to paralysis of the left half of the

body with increased œdema—namely, plugging of the right middle cerebral artery—led also to both absorption of the effused fluid from the right leg, and to such a change in the vessels that it was no longer poured out. But upon the clinical meaning of œdema and anasarca I will speak to you at length another day. The clots in the heart and artery were embolismic, and due doubtless to the state of the blood, as is now, I think, ascertained. Such a condition is not uncommon in women during pregnancy and parturition, but here you have an instance in which it coincided with the return of the menstrual period. The consequences of that condition are, however, not always, or even most commonly, embolismic. Not unfrequently the fibrin is carried along the circulation and deposited in the capillaries, so as to cause inflammation of the membranes of the brain. We had examples of this last spring."

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Medical Times and Gazette.

SATURDAY, DECEMBER 28.

1861.

THE list of our dead is always a long one, and this year there has been no sparing. Accident, disease, toil and natural decay have done their usual work. We had barely time to add the honoured name of Rigby to the list of 1860. That of 1861 almost begins with Baly. A cruel accident prematurely ended the career of Baly. Thirty years of unrelaxing Professional labour proved almost as prematurely fatal to Rigby. Royal favour and public confidence were no charms against a fate which all deplored. Following them in the great crowd we mark other notables, and we linger with regret over such men as Dr. Andrews, Professor of Physiology at Queen's College, Birmingham, Dr. Noble, M.P. for Leicester, Mr. George Jackson, who did so many things for microscopical science, Sir William Burnett, Dr. Francis Adams, of Banchory, the type of much unrecognised provincial merit, Dr. Roots, Sir William Pym, Seth Thomson, Henry Gray, Professor Quekett, Dr. Cusack, Mr. Pittard, Sir John Forbes, and Dr. Southwood Smith.

The more important books published this year have been "The System of Surgery," edited by Mr. Holmes, Barwell on "Diseases of the Joints," Lyons on "Fever," Meryon's "History of Medicine," Jenner on "Diphtheria," Alison's "Physical Examination of the Chest," Hunter's "Essays and Observations," edited by Owen, "The Roll of the College of Physicians," Ogilvie on "The Genetic Cycle in Organic Nature," Goodfellow on "Disease of the Kidney," Brinton on "Food and its Digestion," Arnott's "Survey of Human Progress," Syme's "Observations in Clinical Surgery," Haynes Walton's "Surgical Diseases of the Eye," Russell Reynolds on "Epilepsy," "Guy's Hospital Reports," and the *Transactions* of the various Societies. All of these works have been fully reviewed by us, and our readers made acquainted with their respective merits and peculiarities.

The only Bill passed by Parliament this year relating to the Profession was one entitled, "The Vaccination Acts Amendment Act, 1861," which provides that the Poor-law Boards may appoint persons to prosecute under the Bill those whom the Medical Officers report ought to be prosecuted. It also allows the expense of prosecution to be paid out of the poor-rates, unless the magistrates should be of opinion that the information was improperly brought. Another clause confines the power of recovering expenses to official persons, and regulates the appropriation of penalties. The Act also gives power to take these proceedings on account of neglect in having a child vaccinated at any time during which the parent or guardian is in default.

In the Law Courts two cases of importance of a Professional character have been decided. Vice-Chancellor Page Wood gave judgment upon an information filed at the instance of the Apothecaries' Company for the purpose of restraining the Royal College of Physicians from granting licences to Medical Practitioners, purporting to enable them to combine the sale of medicines with their practice. The Apothecaries claim an exclusive right to vend licences giving such powers under the Act of Parliament of 1815. The College of Physicians rely upon the late Medical Act as authorising their new licences. The Vice-Chancellor's decision has left the real question at issue in quite as unsettled a state as before the commencement of legal proceedings. No doubt it has now been established by that Judge's dictum that the College bye-laws regulating the conditions upon which their licences may be issued are valid, and henceforth can be granted on the terms proposed; but the question how far the holders of such documents will be able thereby legitimately to supply medicine to patients under their own care, yet remains open. Until that point is determined by some competent tribunal, the mere College Licentiate must be content to act under the possibility of an indictment, or an action for penalties for having infringed the Apothecaries' Act. To be quite safe, he must protect himself with one of the old well-known paper permits "*quæ prosunt omnibus.*"

In the Court of Queen's Bench Mr. Thomas Gutteridge in person moved for a rule calling upon the College of Surgeons to show cause why a mandamus should not issue commanding them to admit the applicant to the rank of Fellow of the College? He had made due application, was ballotted for, and rejected. His object in coming to the Court was to ascertain how the Members of the Council, with whom the election rested, had voted. Mr. Justice Blackburn said it was optional, and not compulsory, for the Council to elect a Fellow, and the Council was not bound to give a reason for rejecting any one. The rule was accordingly refused.

The Medical Council met at the latter end of June. The new Members who took their seats were Dr. Sharpey, Mr. Arnott, and Mr. Hargrave. Dr. Sharpey was appointed treasurer. The financial statement shows a considerable excess of expenditure over income; part of this arises from temporary causes, and an expected increase of income is thought likely to restore a proper balance for the future.

The Committee appointed to consider what further amendments in the Medical Act would be desirable, reported that they approved of most of the suggestions contained in the report printed in the "Minutes of General Council," June, 1860, that they had held an interview with a deputation from

the National Medical Registration Association, and had received communications and memorials from other Associations. They state that, "with regard to the various amendments laid before them, the Committee at present feel themselves unable to do more than present them to the Council with a view to their being fully considered between this time and the meeting of the next Session of Parliament." Several alterations were made in the Register by the insertion and omission of names after due investigation of applications and complaints. The Council found themselves unable to answer a question put to them by the Director-General of the Army Medical Department as to whether the licence of the Apothecaries' Hall of Dublin entitles the holder to be registered under the Medical Act as a Practitioner in Medicine in Great Britain and Ireland, and "respectfully declined to pronounce an opinion on what they regard as a purely legal question." The Pharmacopœia Committee appointed a conference of delegates, which took place at Edinburgh, under the presidency of Dr. Christison. The business transacted consisted in the general adjustment of details, and it was found that the preparations were so far advanced as to lead to a hope of publication early next spring. Nearly all the Licensing Bodies have acceded to the desire of the Council by adopting their recommendations in reference to general and professional education.

The College of Physicians of London issued their new regulations for the admission of Licentiates on the 22nd of last December. Those regulations are now in force. The licence does not extend to the making a Licentiate a Member of the corporation. This proceeding of the College has brought out opposition on the part of the Apothecaries' Company to which we have already referred. What is now done should have been done years ago. But it is well that the Profession should be so near emancipation from all contact with trade. The first annual election of President under the new system took place in March, and Dr. Mayo, the old President, was re-elected. Dr. Beale's Microscopical Demonstrations at the College were delivered to large audiences. The attempt showed good will and liberality on the part of the College, and great energy and perseverance in Dr. Beale; but we differ on the point of the expediency of such public displays. To be successful as demonstrations, they require more trained skill than can ever be found in a mixed assembly, and to be satisfactory to those who are competent to judge, there is wanted the opportunity of independent manipulation and observation.

A salutary innovation was this year made in the routine proceedings of the College of Surgeons. Election by seniority and re-election are to be no longer the rule of the Council. Without any manifestation of personal feeling, the Fellows voted the substitution of Mr. Fergusson for Mr. Bishop. Good results from this establishment of a principle will be seen in due time. Mr. Cæsar Hawkins is President for the year, and Mr. Coulson's Hunterian Oration was a great success.

The attempt to amalgamate the Pathological, Epidemiological, and Obstetrical Societies with the Medico-Chirurgical, unfortunately failed, after a majority of thirty-eight against twenty-three had adopted the motion brought forward at a special meeting, by Mr. Charles Hawkins, to the effect, "That it is the opinion of this meeting that it would tend to the advancement of Medical Science were the Royal Medical and Chirurgical, the Pathological, the Epidemiological, and the Obstetrical Societies united under one head, and the different branches of Medical Science carried out in corresponding sections of one Society." A number of influential Fellows, holding contrary views on the question of incorporation, have since signed a memorial urging their Council to consider the "expediency of carrying out the propositions recently discussed, by sections of the Society selected for that purpose."

Among the matters relating to the Profession at large, or to sections, or individuals of it, we may mention that at the general meeting of the British Medical Association, as well as at a previous Branch Meeting, there was a prolonged and vigorous discussion upon the subject of Special Hospitals, and it seemed to be generally admitted, that a primary consideration in the organisation of General Hospitals should be to make them all "Metropolitan Frees" for Surgeons as well as patients, and that the rise of Special Hospitals is to be traced to the necessity for Reform in the General Hospitals. Mr. John Stewart, of Liverpool, the architect to whom the matter was referred, has awarded the sum of £296,000 for the purchase of the whole of St. Thomas's Hospital by the Charing Cross Railway Company. That important establishment will, therefore, soon be obliged to quit its ancient quarters. Several new sites have been suggested for the Hospital, among others the Magdalen, the Foundling, the vinegar works of Messrs. Potts and Co., at Southwark-bridge, the Surrey Zoological Gardens, Vauxhall Gardens, and various suburban spots, but no decision has been come to.

In passing the Army Estimates it was determined to reduce the number of Assistant-Surgeons. About sixty of those officers were ordered to be placed on half-pay. The alteration of the warrant of the Army Medical Department, reducing the position of Army Surgeons, has also caused disappointment and distrust. The same may be said of the notice issued by the Secretary of the Admiralty of an order in Council, directing the relative rank of the Medical Officers of the Navy. The way, too, in which the claims of the Parsees to be examined in competition for the office of Military Surgeon were rejected by the Secretary for War gave anything but satisfaction to the Profession. Dr. Jenner's appointment, however, as Physician Extraordinary to the Queen, in place of the late Dr. Baly, was regarded as a well-merited mark of respect and confidence.

Our readers are aware of what this Journal has been during the progress of its last two volumes. We can refer to promises more than fulfilled, and we may reasonably infer from the still increasing number of our subscribers that our efforts have been appreciated. The Lectures of Simpson, Bernard, and Adams are no mean contributions to science. The clinical teachings of West, Jenner, Clark, Soelberg Wells, Anderson, and others, are of more than usual importance. The valuable letters of our Foreign and Provincial Correspondents have opened up a wide field of new interest, while our reviews and leading articles have ranged over every subject that really required or deserved notice. It has been our aim to furnish early and accurate information, and truly to give voice to the feelings and opinions of the Profession. We have reason to believe that we have succeeded, and that both Editor and readers may close the year with a hearty response to the dictum of Portia,

"He is well paid that is well satisfied."

And now, upon thus concluding this brief summary of the events of the closing year, the duty—sad in some respects, pleasant in others—devolves upon the Editor of saying a few words of

FAREWELL

to those whom he has addressed for more than seven years under the typical form of Editorial plurality.

In July, 1853, the Editor who now retires first took charge of the *Medical Times and Gazette*, and conducted it until February, 1854, when he was entrusted with an important post in the Eastern Hospitals during the Russian War. In October, 1856, he resumed the Editorship, and has held it

until now. More than thirteen volumes of this Journal have, therefore, appeared under his direct superintendence. The task has not been a light one. No one feels that the wants of the day or week are satisfied without the accustomed Journal. The "latest intelligence" and the last leader must be punctual as the postman. Information from all quarters, and opinions upon all subjects, must meet the universal demand. We have ceased either to glean or to grind, to kill or to carve, for ourselves. The roll and the eland must be ready when the bell rings, and we dine *à la Russe*. Social news and home-bred opinions are out of fashion. When we meet in the morning we all know which way the wind blows at Aberdeen, and we talk, more or less, according to memory, the *Times* or *Saturday Review*,—our paper, whatever it may be. Equivalent exaction is the law of social intercourse. The divine plumply asks the lawyer his opinion on the minutest point of international law directly he sees a telegram. The lawyer expects the divine to be ready to expound any passage of "Essays and Reviews" on the day of publication. Our patients are not content with being cured themselves; but they must know the exact force and rhythm of the Pope's pulse, the *rationale* of Italian therapeutics all through a Cavourian or Garibaldian illness, the post-mortem appearances in the Emperor of China, or the death-rate, per last return, of any place to which they may think of going. Much of this is the result of journalism, and journalism alone can stay the artificial craving for promptitude. For good or for bad the want has become real; and the sober generalising Essayist of the *Tatler*, *Spectator*, or *Rambler*, has Darwinianised into the fact-giving, opinion-leading, modern Editor.

The duties of the Editor of the *Medical Times and Gazette* were threefold. His readers claimed early, copious, accurate news, scientific activity, impartial criticism, a just estimate of all the controversial matters of the day, and a well-balanced display of arguments and opinions wherein discussion is admissable. Contributors and fellow-labourers have a right to expect a definite aim in policy, fairness, and consistency in discipline; and, thirdly, the Editor was responsible to the proprietors for the prosperity of their venture. He is, perhaps, unable to decide impartially how his task has been done. But if commercial success is to be taken as an expression of the verdict of the Profession, he has good reason to be content. Year after year the list of subscribers has steadily increased, and it is now more numerous than ever. The year now closing has been the most prosperous in the whole history of this Journal. No one can dispute its condition. It can be made neither better nor worse than it is by praise or censure. It has risen from the respectable torpidity of the *Gazette* and the feverish irritability of the *Times* to the position of calm equality or pre-eminence now accorded to it. It is for others to judge whether the promises of 1853 were vain words or are now realities. It is quite fair to put the volumes to the test; and an Editor, who speaks less for himself than as the mouth-piece of a staff of fellow-labourers, may be excused, perhaps, for declaring emphatically that the words "constant improvement," with which his first address ended, have been steadily borne in mind, and that earnest efforts have been continued to make each volume better than its predecessor in every department. Lectures from the most esteemed teachers have been obtained, and they have been illustrated by engravings to an extent which a few years ago would have been simply impossible. The muster-roll of other contributors is also an illustrious one. The name of almost every free man of eminence is to be found in it. Of course, no one journal can take up "all the talents." Competition divides men into ranks. Accident, partialities, and sometimes unseen under-currents, determine the position they take. There are white and red roses in Medical Literature; but when a Richard has been in the field a Richmond has generally been found to match him—and if this Journal is to be measured by the standard of its contemporaries, the departments of Lectures and Original Communications are certainly those in which comparison need not be feared. As to the work done by the Editorial Staff, the watchword "constant improvement" has certainly been acted up to in the Reports of Hospital Practice. The returns of the Statistics of London and Provincial Hospitals, collected since 1853, have brought many unknown truths to light, and have been acknowledged, both at home and abroad, as real additions to Surgical Science.

It is not easy to speak of the Leaders and Reviews without inevitable bias; but, as during the last two years, and especially during this year, the pressure of engagements in Professional practice has increased until the Editor has been gradually driven to trust more and more to his coadjutors, and latterly to depend almost entirely upon them, he certainly cannot be accused of egotism if he declares that the purely Editorial articles in 1860 and 1861 prove that the "constant improvement" aimed at in 1853 has led to the attainment of greater excellence. A well-marked standard, and the good of the Profession as an object, have insured ready and constant co-operation. The pleasure of assisting aspiring merit has been great. The gratification of being helped by mature wisdom has not been less. The search for contributors has often led to the finding the hidden treasures of friendship. Ink has often changed into wine—colleagues have become hosts, guests, friends, and brothers. It would be impossible to attain this without some alloy. Duties, unpleasant as well as agreeable, have been performed. All books are not so perfect as their authors believe them to be, and a just criticism has been followed by personal antagonism more or less open. The course adopted by some learned bodies has called for censure. The ultra-conservatism of some, and the ultra-liberalism of others have received the necessary checks, and it has been impossible to do public good without affecting the interests of some of those who were pulling the strings. But this forms but a drop of bitterness in a cup otherwise full to overflowing of pleasant recollections of cordial co-operation.

The "improvement" attained during the present year is most conspicuous in the manner in which the Foreign and Provincial Correspondence has been developed. This department is now thoroughly organized, and the machinery works well and smoothly.

This review of the past augurs well for the future. The new year opens with happy auspices for the Journal. The removal of the paper duty permits of a reduction in price, and the Proprietors are enabled, by the more numerous advertisements which naturally accompany an increasing circulation, to add to the size. The volume concluded to-day contains some fifty pages more matter than the only Medical journal which can be considered as a rival, and the Proprietors have decided that this increase in size shall keep pace with the number of columns devoted to advertisements. These commercial arrangements, combined with a reorganisation of the Editorial staff upon a plan suggested by past experience will, doubtless, meet with the approbation of the Profession, and will carry the "Medical Times and Gazette" onwards in its course of "constant improvement." The happy chance of reaching perfection is still open to all comers. To this we are gradually coming, and shall, perhaps, move faster when the opportunity of addressing weekly some thousands of educated minds is appreciated at its just value, and when those who are now content to look wise and keep silence will condescend to utter the words of wisdom, and speak to the world through the press.

But whatever may be still in store for the Profession, and whatever difficulties there may be ahead, the new Editorial Staff is well prepared to gather up the grain and blow away

the chaff, and the old Editor now retires in good will and in good hope.

——— "O fortes pejoraque passi
Mecum sæpe viri, nunc vino pellite curas;
Cras ingens iterabimus æquor."

THE WEEK.

We receive so many complaints of the "parsimony of Boards of Guardians," and of the "neglect of parochial authorities," and so many direct statements, that it is their duty to enable their Medical Officers to order wine and beef-tea, to the fullest amount, for the sick poor, that it is almost necessary to remind some of our readers that there is another question involved—Who pays for these things? What right has one portion of the community to be supplied in sickness with wine and other necessaries, at the expense of others, many of whom can scarcely afford them for themselves? Why should the struggling small shopkeeper, or other ratepayer, just able to maintain his own family, and striving hard to do so, be taxed for the benefit of persons without industry or frugality? Mrs. Wightman, the well-known teetotal reformer of Shrewsbury, tells us, that when a certain number of her converts had been reclaimed from their bad habits, had ceased to drink, saved their wages, and got a tidy home, the first symptom of their reception into the higher order of society, the first reward they met with from their fellow-citizens, was a summons for arrears of poors'-rates! Had they gone on in drunkenness and rags, they never would have been asked for the money! The small tradesman or artizan, who pays for his own Medical attendance and medicines, and wine, is positively discouraged in his course of honest industry and independence, when he sees his thriftless drunken neighbour treated like a prince at the public expense. Of course a man who has to treat a fever, must get wine and beef-tea, and must clamour for them if need be. Our parish Medical Officers are quite right in that respect, and do their duty from their own point of view; but so do the Boards of Guardians when they mete out the desired supplies with the most rigid economy. We will not speak of the country, but in London all accounts agree in bearing witness to the disastrous effects of indiscriminate relief. That honest self-reliant feeling of independence which prompts a man "to learn and labour truly to get his own living," is discouraged and destroyed. Hypocrisy is fostered. We know of cases in which persons, pretending the most abject poverty, receiving alms and all kinds of gifts (including of course the gratuitous services of Dispensary Physicians), the pet clients of the clergymen and district visitors, have died leaving a snug hoard of two or three hundred pounds. We have authentic accounts by the score, of bread distributed lavishly, and sold for the merest trifle, or thrown away. Journeymen tailors who earn extravagant wages, and are never without their Sunday newspaper, their betting-book, and weekly treat, yet never have a penny for medicine or comforts when sick. "I wish my husband would pay you that guinea for my confinement," said a poor woman to a General Practitioner; "but 'tis his betting that keeps us all so short." The ladies employed as "district visitors" are often utterly unqualified for their task, and easily imposed on by the hypocritical stories which the idle and drunken soon find out to be acceptable to them. We know that even the sanitary machinery is liable to abuse in the same way. An Inspector of Nuisances, sent to a house where diarrhœa prevailed, remonstrated with a woman for not putting on the trap of a sink, which sent up a poisonous stench into her room. "I don't see why I should do that," was the reply; "you are paid to look after such things." We know cases in which Dispensary Physicians have been treated with the grossest rudeness and contempt by people who could not enjoy the luxury of having "further advice," without insulting those who had been their benefactors hitherto. As with gratuitous advice, so with respect to liberal supplies of wine from public sources; there is an evil as well as a good side. God forbid that any lives should be lost; but even in saving life, we must take care that we do not injure what is more valuable—the feeling of honest, self-dependent virtue amongst the working classes. There is many a ratepayer to whom a bottle of good wine, and means of getting sea air for the children, would be a far higher charity than helping those who will not help themselves.

A peculiarly unpleasant case was tried at Liverpool last week, in which a dentist, of Manchester, was charged with having seduced a girl who came to him as a patient, and of having taken advantage of her whilst under the influence of chloroform. Knowing what we do of the occasional dangers to life of chloroform, we think it scarcely prudent that any unprofessional man should take the responsibility of administering it without an assistant; and there remains the obvious inference that Professional men who receive women alone, and give chloroform, run other risks which render the presence of a witness a matter of prudence.

The London Medical Officers of Health, at their meeting on Saturday, were occupied with the defects of the "Metropolitan Building Act, 1855," which Mr. Liddle, the experienced Sanitary Officer of Whitechapel, laid before them in a short and lucid paper. It was observed that the Act, precise and stringent as it is in all the provisions which relate to the solidity of structures, is most feeble as a check upon arrangements utterly incompatible with health, and that its sanitary provisions, such as they are, are not enforced by the District Surveyors. It is but fair to add, that it is quite impossible that those gentlemen should enforce them. For example:—The Act forbids any "habitable room" in any house to be built less than seven feet in height, except that habitable rooms in the roof must be seven feet in height throughout at least one-half of their area; but a builder erects a house with attics of less than this average height; he is remonstrated with by the surveyor, but declares that these rooms are not intended for "habitable" rooms, but only for receptacles of lumber. Nevertheless, the in-coming tenant puts his servants to sleep in them, and would be astounded if called upon to pay a penalty for so doing. Yet the Act says:—

"Whosoever knowingly suffers any room that is not constructed in conformity with this Section to be inhabited, shall, in addition to any other liabilities he may be subject to under this Act, incur a penalty not exceeding Twenty Shillings for every day during which such room is inhabited; and any room in which any person passes the night shall be deemed to be inhabited, within the meaning of this Act."

It is clear that no District Surveyor, unless metamorphosed into a cat, could get evidence of the infringement of this clause. But we suspect that a common informer might reap an abundant harvest in the suburbs. Kitchens and cellars are also forbidden by the Metropolis Local Management Act to be "inhabited," unless of a certain height; and the District Surveyors are directed to ascertain and report upon such as are inhabited illegally, but they have no power of entry to obtain evidence. So that, as in the case of the Adulteration Act, it is useless to make a law, without providing some means for enforcing it. The clause in the Act which Mr. Liddle more particularly commented on was this:—

"Every building used, or intended to be used as a dwelling-house, unless all the rooms can be lighted and ventilated from a street or alley adjoining, shall have in the rear, or on

the side thereof, an open space exclusively belonging thereto, of the extent of at least one hundred square feet."

Whilst commenting on the utter inadequacy of the provision, even if strictly adhered to, Mr. Liddle showed how frequently it was evaded. Mr. George Godwin, Mr. Edwin Chadwick, C.B., and other gentlemen who spoke, complained of the want of some provision for enforcing the selection of wholesome dry foundations, and wholesome material. Mr. Rendle and Mr. Burge spoke of buildings erected of the most porous timber, on the wettest of soils, and among the members present the opinion was unanimous that society needs to be enlightened as to the dangers resulting from the badly-built tenements which are springing up like mushrooms around us.

MEDICAL BENEVOLENT FUND.

We have much pleasure in assisting Sir James Clark and Mr. Toynbee, the President and Treasurer of the Medical Benevolent Fund, by calling the attention of our readers to the following note and Appeal. Christmas time is the season when all hearts are especially open to charitable appeals; and we trust that this seasonable address will meet with a generous response:—

Bagshot-park, Surrey,
Dec. 20, 1861.

Dear Toynbee,—I think it very desirable that your feeling Appeal in behalf of the Medical Benevolent Fund should be circulated amongst Members of the Profession. No one can read that appeal without being convinced of the great usefulness of the Fund, and I trust it will induce those into whose hands it may fall to extend the knowledge and promote the interest of a Society of which the Medical Profession may be justly proud.

With my best wishes and thanks for your unceasing efforts to promote so good a cause,

I am faithfully yours,
James Clark, *President.*

P.S.—If you think it of any use, pray publish this note with your Appeal.

APPEAL.

When I call to mind the frequent eloquent appeals in behalf of the Medical Benevolent Fund by my able and generous-hearted predecessor, Mr. Newnham, I sometimes doubt whether I ought not to do more than I am doing to promote the welfare of the Fund.

And still, upon reflection, I always feel inclined to let the success and progress of our charity depend upon the slow, but sure, recognition of its usefulness, arising from a due appreciation of its deeds.

I may be wrong in not appealing more openly to the members of the Medical Profession; for among them I full well know, from my own experience, there are very many blessed with an abundance of this world's goods, and blessed still more with generous natures, who are grateful to be told where their generosity can be most usefully bestowed. So, to the Medical Profession and to the public who have hitherto aided us most liberally, I venture this Christmas time to say a few words in behalf of the Medical Benevolent Fund.

In the *first* place, I will state that the experience of several years as an officer of our Fund, has taught me that in spite of forethought, prudence, self-denial, and the most arduous exertion, cases must occur (and doubtless it was intended by an All-wise Providence they should occur), in which a Medical man, and through him his widow and his children, feel the bitter pangs of want, too often deepened by the presence of disease.

And while I make this statement, I am also prepared to allow that many who neglect it might take the advantage of Institutions for life insurance and Provident Beneficent Societies similar in principle to the most excellent "Society for the Relief of Widows and Orphans of Medical Men."

But I cannot conceal from myself the further fact, that many men are by nature so ardent and hopeful, so confident of success—of great success, that they will not, cannot, heed the still small voice that ever and anon whispers of possible failure—of future want.

In the *second* place, I full well know, that the rapidly increasing family, which seems almost characteristic of a Medical man, occurring at a time when practice does not proportionally increase, too frequently renders the struggle of life hard and constant, and leaves the future to be met as it best may be met, too thankful if the present does not overwhelm.

In the *third* place, I know that want of health, caused too often by the unceasing wear and tear of life, prostrates many a Medical man when his energies for the support of his wife and children are most demanded, and when the premium to be paid for his life insurance is an additional call upon him.

Is it, then, a wonder that so many Medical men are to be seen, broken down by overwork, disease, and misfortune, and that they, their widows or orphans, in poverty and in sorrow look around for aid?

The benevolent men who founded "The Medical Benevolent Fund," knew well, and felt deeply for, the poverty and misery by which their professional brethren are so often overcome; they accordingly laid down such rules for the administration of the Fund as would not only tend to relieve misfortune, but would do so without delay, without expense and anxiety,—without in any way causing additional misery to the sufferer.

And the rules laid down are very simple; the chief one being, "That a Committee, elected annually by the Subscribers, shall meet monthly to investigate the claims of the applicants, administer immediate relief in the more urgent cases, as far as their funds allow."

The earnest performance of the duties of the Committee has led to a success scarcely contemplated, though far below the necessities of the Profession.

Last year the Committee gave in donations to ninety-nine applicants, £890, and to sixteen annuitants, £298.

In the course of the last ten years they have given in donations to 776 cases and 16 annuitants £9099 13s. The nature and extent of the benefits bestowed, the amount of misery relieved, will be in a measure better understood by a perusal of the following words from some of those who have been aided:—"You helped me at the moment when ruin seemed inevitable. Your bounty was indeed a God-send. I am again at work, full of gratitude and hope. How shall I ever be able to express my heartfelt thanks?" "You have spared me the horrors of a canvas, in which I should have been forced to parade my misery before the world and make the most of it. You would be able to know how deep is my gratitude to you if you knew all the harass, fatigue, excitement, and suspense I once endured in the futile endeavour to obtain in a contested election a like annuity to that you have given me. My friends can scarcely believe that I have from you £20 a-year for life at the cost of six letters to the Treasurer. May God bless your Committee." "The noble grant of £30 found me a penniless widow with eight children. I am now in a small business, and am keeping myself and family." "I am in the midst of a fierce battle to get into the 'Hospital for Incurables.' I work at it for two days, and then am so knocked up and ill that I lay in bed for a day. Then I begin again. Your £5 is the greatest blessing I have ever known." "I do not know how to thank you. The £15 voted by your Committee on condition that my friends would get up a fund for me, induced them to do their best, and they have bought me an annuity of £20."

Such are some examples of the expressions of gratitude by which our Committee are constantly greeted; and surely no higher tribute to our real usefulness can be found.

Having quoted these words of heartfelt thankfulness, I need scarcely add that the Committee find a real pleasure in the performance of their duties. Indeed, I rarely leave the room after a meeting but some member says words to this effect:—"The more I see of the working of our Fund, the large amount of real good it does in its quiet way, the more gratified I am to be able to help it;" and I may add that scarcely a meeting passes without some member or members bringing money, while at the last meeting one of our oldest members slipped a hundred pound note into my hand. Nor must it be conceived from what I have said that our Medical Benevolent Fund is an exception to the rule in all other human things—that to accomplish any real good time and labour are demanded, and anxiety and trouble undergone.

Each case that comes before the Committee must be fortified by documents, and statements, and by evidence, very often the result of personal inquiry; still in their strong desire to deal justly with their funds the Committee are often obliged to postpone decision upon a case until still further inquiries have been made. And in spite of all their endeavours to be charitable only to the needy, they are conscious that they must be sometimes deceived.

Nevertheless, considering the great difficulties in accomplishing satisfactorily any work, considering also when the very best has been done by man, there always remains a sadly large gap between his intention and its fulfilment. I think I am justified in saying, that, looking at its principles and its deeds, the Committee can conscientiously hold up The Medical Benevolent Fund as deserving of support from the enlightened benevolent public. And, I may be allowed to add, that the Fund has also the characteristics of a Christian charity in the smallness of its working expenses.

Their meeting-room is provided gratuitously, they have above forty honorary local secretaries and lady collectors; indeed, they have but one paid officer, the Secretary, at a salary of £30 a-year.

In conclusion, I will refer those who desire further information to the Twenty-sixth Annual Report, in it will be found a *resumé* of each case relieved in the years 1860—61.

I cannot hide from myself how sadly weak is my advocacy of the cause for which I plead. I ask myself the question, How is it possible to secure a sympathy from the Profession equal to that felt by those who take an active part in the charity. Doubtless to do this is impossible, for those only who are brought near to suffering can feel due sympathy for it. But I may be allowed to add that if I could convey to those who read these lines, the sentiments of heartfelt sympathy and pity expressed by the Committee, when at the last meeting a pitiable case was brought before them. A widow and large family (eight young children) left penniless in a distant land, where the father, a man of great talent and well-earned scientific fame, had been cut off at the age of 40. If I could convey the dismay and sorrow of the Committee when a sum proposed to be voted had to be cut down again and again until it was so mere a pittance in comparison with the urgency of the case, that as almoners of the Medical Profession they were half ashamed of the amount, and voted it in silence. If I could do this, I feel sure that I should not soon again be heard asking alms in behalf of The Medical Benevolent Fund.

Joseph Toynbee, Treasurer.

18, Savile-row, Burlington Gardens, W. December, 1861.

FOREIGN CORRESPONDENCE.

SWITZERLAND.

Berne, November 7.

THE CLINIQUES OF THE UNIVERSITY.

Our Medical Clinique, which is under the direction of Professor Biermer, has been full of interesting cases lately. Among others, we have had an instance of Morbus Addisonii in a weakly girl of 18. The patient, after having for some time suffered from cough and expectoration, suddenly showed an extremely dark-coloured skin, more especially on those parts of the body which are generally left uncovered, and which increased in intensity proportionately to the decrease of the weight of the body. Large vomicæ existed in both of the lungs. There were for some time metallic phenomena of auscultation and percussion, so that it was supposed that a pneumo-thorax had been formed; but after a short time these symptoms again subsided. The patient at last became extremely emaciated, and death ensued. The case had a peculiar interest from the results of the ophthalmoscopic examination, which, as far as I know, has never yet been made in instances of this affection. A bluish-black colour was everywhere visible through the sclerotica, and a peculiar pigment existed in the interior of the eye. In a plane of uniform red-brown colour there were blueish-black spots, corresponding to the intermediate spaces of the vasa vorticosa, and from which the retina was distinguished by its delicate white appearance. All the vessels were hyperæmic, down to their last ramifications; but there was no disturbance of vision. The supra-renal capsules were not changed, but tubercles were found, not only in the lungs, but also in other organs. It is probable that Morbus Addisonii is, just as Morbus Brightii, a collective name for very different diseases. At all events, the abnormal coloration, in the majority of cases, rather depends upon morbid changes in the blood than upon a local disease. This latter may, however, cause the pathological condition of the blood, and thereby become of importance. The late Professor Vogt, of this University, has repeatedly drawn attention to the connexion which exists between anæmia and the formation of abnormal pigment; he had called this form of anæmia the vagabonds' disease, as it occurred especially in gipsies, hawkers, *et hoc genus omne*.

A case of medullary sarcoma of the pons Varolii was of interest as affording another proof that all the beautiful theories that are worked up by experimental pathologists on the diagnosis of the existence and the seat of tumours of the brain, are of very little practical value. The patient was a man, aged 40, and suffered from violent neuralgic headache, with somewhat protracted free intervals. A year afterwards a semi-paralytic condition of the lower extremities ensued. The gait was tottering, even if the patient took especial care to remain in a straight line. The movements of the muscles of the eye seemed difficult at times, and the right lid paralysed; but these symptoms disappeared soon afterwards. Vision was never disturbed. After the patient had been in the Hospital for a month, during which various methods of treatment had been resorted to, his intelligence had considerably decreased, although no fresh symptoms had come on, and the headache had not returned. Numerous hard tumours of lymphatic glands became visible along the sterno-cleido mastoid muscle; the dementia paralytica increased, and death ensued soon afterwards. The post-mortem examination showed a fungus medullaris, which was quite confined to the pons Varolii, and had raised and atrophied the corpora quadrigemina. Of this whole part which is so important for the conduction between the brain and spinal cord, only a thin layer of superficial fibres remained. The tumours on the neck were likewise of an encephaloid character. In the spleen nodes of medullary matter were found, which had the form of raspberries.

The Director of the Surgical Clinique is Professor Demme, who has occupied the Chair of Clinical Surgery since the foundation of this University with unwearying zeal. Amongst the many interesting cases which have been in his wards lately, I will merely mention one, of unilateral dislocation of the pelvis, which, I believe, is the only one of this kind on record. It is generally assumed that, if any violence acts upon the lower end of the pelvis, a fracture of it, and more especially of the pubis, is the consequence, rather than a separation of the synchondroses. A case of the latter kind, which I am about to relate, may, since Luschka has shown the existence of amphiarthroses of the symphysis and the synchondroses, justly be called dislocation. A man, aged 38, fell on his back, on the even ground, at the side of a heavily-laden cart, and remained senseless for half an hour; when he recovered consciousness he endeavoured to get up, but could not do so. A Doctor, who saw him a short time afterwards, found the residue of a commotion of the brain, and believed the paralysis of the lower extremities to be due to a commotion of the spinal cord. The most urgent symptom at that time was retention of urine, which also seemed to render a lesion of the cord probable. The catheter did not arrive in the bladder, but great pain and hæmorrhage ensued. This was a sign of injury to the urethra and fracture of the pelvis. The inspection of the body showed a very strong contusion and sugillation corresponding to the left tuber ossis ischii. The left crista ossis ilei and the protuberantia sacro-iliaca was felt higher than usual. There was little mobility in the synchondrosis sacro-iliaca and the symphysis pubis; the left leg appeared shortened, and was quite paralysed. Professor Demme diagnosed a lesion of continuity in the pelvis, close to, or in, the symphysis. The perinæum soon became much infiltrated, and the bladder so considerably extended, that he divided the perinæum, and introduced a catheter into the bladder, which was then emptied. Five days afterwards death ensued. The autopsy showed a dislocation upwards of the left half of the pelvis, a division of the ligaments and the amphiarthroses of the symphysis pubis, and the left synchondrosis sacro-iliaca;

while only those parts of the bones were torn off in which the ligaments were inserted. Sugillation in the muscles of the left side of the back showed that a considerable contusion had taken place there. The left kidney was ruptured in two places, probably by the left crista ossis ilei having been pushed upwards. There was hæmorrhage within the kidneys, but the blood had been retained by the capsule. The urethra had been entirely torn off at its prostatic part, and the catheter had fortuitously met the central end of the urethra, and thus arrived in the bladder.

GENERAL CORRESPONDENCE.

MEDICAL PERIODICALS.

LETTER FROM MR. THOMAS MARTIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your Journal of the 7th instant is a short notice of an address I had the pleasure to offer at an evening party of gentlemen who had been educated, or were in course of education, at the Medical School of St. Thomas's Hospital, "On the Experience and Observation of my Student Days at the Borough School, sixty-five years ago, commencing October 1, 1796," in which I am reported to have said that then there were no Medical periodicals, and that the literature of the Profession was at a low ebb. Permit me, in the way of explanation, to state that although there had been yet no Medical journals published at stated intervals, there had been occasional volumes of Medical and Surgical cases and papers published by associated Physicians in the same way that the Royal Medical and Chirurgical Society issues its volumes at the present time.

Perhaps the first series was "Medical Observations and Inquiries, by a Society of Physicians in London," commencing in 1771, published by Johnston and Cadell, which went on to five volumes. It was so highly esteemed by the Profession that these volumes reached a fourth edition. The Royal College of Physicians published three volumes of "Transactions," under the superintendence of Sir George Baker and the great Dr. Heberden. The former was Physician to the King and President of the College, and was said to be the most profoundly learned Physician of his time. Sir George told my father that the publication would be discontinued with the third volume, as he and Dr. Heberden, with Dr. Henry Revall Reynolds, were not properly supported by the other members of the College. These very eminent men were scientific and able Physicians, and each had a large practice. After the lapse of a few years, however, the College resumed the publication, which went on to another three volumes, a good deal, I believe, at the instance of Dr. Pelham Warren, but by that time there were monthly journals, which rendered the issue of these serials less necessary.

"The Lyceum Medicum Londinense," or a Society for the Improvement of Medical and Surgical Knowledge, in which, I believe, the Hunters, with Dr. Fordyce and others, were associated, issued two or three volumes, edited by Dr. Samuel Simmons. The old "London Medical Society" issued six volumes of memoirs and the half of a seventh, when, perhaps, they felt that the monthly journals then in operation rendered their publication less necessary. This Society was founded by the munificent liberality of Dr. Lettsom, who made it a present of a freehold house in Bolt-court, gave five hundred pounds worth of books, and endowed the Fothergillian Medal in honour of his illustrious friend Dr. Fothergill.

In 1799 the *Medical Magazine and Review* was started as a monthly publication, but it went on for three or four months only, when it stopped. I had those numbers, but I fear they are gone the way of waste paper. It was succeeded by the *Medical and Physical Journal*, conducted at first by Dr. Bradley, one of the Physicians of the Westminster Hospital, and Dr. Willich, and published by Sir Richard Phillips. This was so successful that Sir Richard himself told me it produced him for a long time a clear profit of a hundred pounds a month. Then came the *London Medical Repository and Review*, published by the Underwoods, at one time edited conjointly by Drs. Copland, Conolly, and Darwall. The latter died young,—a great loss. The two former, happily, still survive, and may they long live, honoured and distinguished members of the Profession, and to whom we are all highly grateful for the services they have rendered to the Profession as well as to the whole population of the country.

In 1837 the publishers Sherwood, Gilbert, and Piper commenced the publication of a journal under the title of *British Annals of Medicine*, but it did not succeed, and was discontinued.

At Edinburgh Dr. Duncan published an annual volume for twenty years under the title of *Medical Commentaries*, when, continuing the annual volume, he and his son changed the title into that of *Annals of Medicine*, and in the year 1805 the junior Duncan again changed the title and altered the form into a quarterly journal as the *Edinburgh Medical and Surgical Journal*. The elder Duncan, I believe, held the Professorship of the Institutes of Medicine for more than sixty years.

I am, &c.

Reigate, December 16. THOMAS MARTIN.

POISONING BY IODINE.

LETTER FROM MR. BAINBRIDGE.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is so rare to meet with a case illustrating the dangerous effects of iodine when taken into the human stomach, that I offer no apology for asking you to give the following memoranda a niche in your weekly publication.

November 18, Mrs. F., a stout lady, approaching fifty years of age, having been suffering for some time from lumbago, took the preceding night a blue pill, intending that a black draught should follow it next morning. Owing, however, to the housemaid having misplaced the bottle, an ounce of tincture of iodine (equal to half a drachm of the metal) although the phial was labelled "Poison" was taken by mistake, the draught being followed by a little tepid tea. The burning throat instantly gave cause of alarm, the dark stain left after wiping her mouth confirmed it.

Mrs. F., hastened to rid herself of as much of the tincture as possible by washing the mouth and throat with tea, choking and burning the while.

Meantime her husband, who had poured out the draught, (his shortness of sight contributing to the error) having made certain what had been taken, administered in succession two doses of olive oil which were returned almost immediately mingled with iodine; large draughts of warm water were then taken, which caused, for the first time, real explosive vomiting; these draughts being relinquished, so soon as they returned untinged by the iodine.

Quite exhausted and in pain from the lingering lumbago, Mrs. F. returned to bed, states that at the time she took the tincture the stomach was perfectly empty, so that nothing but frothy mucus and saliva were vomited with it—does not think that vomiting would have occurred spontaneously. There was no spasm of the throat noticed, but intense burning, as if the uvula was consumed away; nor could she be convinced to the contrary until after inspection. The fauces were highly florid, and, together with the tip of the tongue and portion of the lip, as if denuded; painful choking continued for two days and nights, only diminishing appreciably on the second night, accompanied all the time by copious salivation. The choking felt as if caused by shreds of skin peeling off in various parts of the throat, accompanied by a sharp, smarting sensation, which was for the moment allayed by a spoonful of jelly or arrowroot, deglutition being so difficult that a considerable pause was required between each act of swallowing.

November 22.—The fauces are no longer painful, but relaxed and sensitive, the region of the trachea smarting, accompanied by frequent lancinating pain; the voice, which, on the first day, was merely hoarse, has now descended into a fatiguing whisper, which became more laborious up to November 28, nor is it any better at the present date, (December 5.) The eyesight was weak for several days, and is still less strong than usual; the right eyelid affected by twitching, being spasmodically looped up into festoons; these spasms have not entirely ceased. The taste was curiously affected, nothing having its proper flavour but sweets; lemonade, grapes, etc., very unpleasant, tea bad, coffee less so, eggs all right; but every kind of wine, even though watered and

sweetened, were abominable, and tasted like nothing describable—acrid, astringent, bitter, acid, and unendurable. Punch, which, from curiosity, was tasted, being, if possible, worse than wine.

It was on the fifth day after the accident that, on account of the existing debility, wine was taken. In fact, the patient felt herself utterly prostrated, both mentally and physically, in entire dejection of spirits, able to read a little, to write very little with much effort, but feeling no interest in anything in life, and though accustomed to the labour of authorship, was quite unequal to fix her thoughts on any subject.

During the first four days Mrs. F. remained in bed, but thinking that her weakness was increased thereby, went into the drawing-room, but could only lounge restlessly from couch to chair, and back again, and so on up to the twelfth day, during which time she had been living on fluid nutrients, which never agree with her, and from which she desisted on their producing headache, changing her diet, by advice, to animal solids and port wine, which, though without appetite, she eats to allay the sense of want or hunger experienced. Under this *régime* the throat is somewhat less relaxed, the strength is slowly returning, but the aphonia still continues.

With respect to the loss of voice, I would add, that it is sixteen years since this lady lost it, previous to which time I had frequently attended her for that unpleasant symptom, and restored it by means of tonics and local astringents.

I am, &c.

Harrowgate. Fred. Bainbridge.

TYPHUS AND TYPHOID.

Letter from Dr. Stewart.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the scientific portion of your article on the lamented death of the Prince Consort from typhoid fever, the impression left on the mind of the reader is, that my researches into the characteristics of typhus and typhoid fevers were carried on after the publication of Dr. Watson's first edition, in 1843; after the celebrated discussion in the French Academy of Medicine, in (I think) 1845; and contemporaneously with the investigations of my friends, Drs. Sankey and Jenner. Those who have access to Vol. xvi. of your New Series will find the whole story given at considerable length by myself, in the Number for March 13, 1858 (pp. 275-277). Those who have not, are hereby reminded that my investigations were made from 1836 to 1839, and were followed up by the publication of my conclusions, first at two meetings of the Parisian Medical Society, in April, 1840, and then in *Edinburgh Medical and Surgical Journal* for October in the same year. What influence that paper may have had in the formation of Medical opinion in Europe and America, on the subject now attracting such universal attention, during the nine years that elapsed before the appearance of Dr. Jenner's well-known papers, I leave to the decision of others, who are probably better informed on this subject than myself.

I am, &c. A. P. Stewart.

74, Grosvenor-street, W., December 23.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, December 17.

Dr. Copland, President, in the Chair.

Mr. Canton showed a specimen of

SYPHILITIC DISEASE OF THE LIVER IN AN INFANT.

The subject of the case was an infant, aged seven weeks, who had been brought to the Charing cross Hospital quite dead. It had been found by its mother dead by her side. Its skin was covered with copper-coloured blotches of syphilitic rash. At the autopsy, Mr. Canton found in the liver numerous yellow deposits, varying in size from a pin's-head to a large pea. There were no cicatrices, nor did the deposits project above the level of the surface. No disease was found in any other organ. Mr. Canton adverted to the similarity of appearance between the deposits in this specimen and those seen in the livers of adults who had suffered from acquired syphilis. He asked whether any members of the Society had noticed this condition in the subjects of inherited syphilis, and at so early an age.

Mr. Hutchinson asked whether the thymus had been examined. He did so because some of the French writers on congenital syphilis held that deposits in the thymus were a very frequent condition. He had himself, in a considerable number of autopsies on infants who had died of syphilis, failed to verify this statement. Deposits in the liver he had repeatedly seen, though seldom to any great extent.

Mr. Hutchinson next exhibited a specimen of

NODE OF THE DURA MATER.

The patient, a man, under the care of Mr. Adams, in the London Hospital, had died, after a short illness, from pleuro-pneumonia. He had been under treatment for tertiary syphilis, in the form of gummy tumour of the fascia of the arm. He had not complained of any head symptoms. At the autopsy, in addition to evidences of acute pleuro-pneumonia, a large cicatrix was found in the upper part of the liver, and several large portions were infiltrated with yellow, waxy material. Both kidneys were double their normal size, flabby, and their entire cortical structure in a state of fatty degeneration. The skull was much thickened, and the diploe had everywhere disappeared. There was no disease on its outer surface. On the inner side of the right parietal bone, however, there was a large patch, where the dura mater was inflamed and the bone much roughened by new deposit. A similar state of things existed in the left frontal region. In the latter part the new bone was scattered in little nodules, resembling bloody sawdust.

Mr. Dickenson brought forward a specimen of

FATTY HEART FROM A CHILD.

The patient, a young girl, was under care in St. George's Hospital on account of follicular ulcerations on the genitals. These were just well, and she was to have been discharged, when suddenly, one night, the House Surgeon was summoned, and found her in a state of collapse, from which she never rallied. During the day before her death she had been much as usual, and had eaten largely at dinner. At the post mortem her stomach was found distended with undigested food; indeed, the process of digestion had scarcely commenced, and, from the condition of the ingesta, it was clear that but little mastication has been practised. The heart, to the unassisted eye, looked healthy, but when examined by the microscope it was found to be extensively fatty. The oil molecules in many specimens wholly obscured the transverse striæ. Both the cavities were distended with blood. Dr. Dickenson thought it clear that the child had died from the failure of a weakened heart, the failure having been induced to some extent by the state of the stomach.

Dr. Bristowe expressed a suspicion that fatty degeneration of the heart was often allowed to account for much more than it ought to. He had seen many cases in which the heart was found fatty after death, in which there had been no symptoms of such a state during life; and thought that we ought to be careful in our inferences as to the share which that state has in causing death.

Dr. Bennett stated strongly his belief that the presence of a large quantity of indigestible matters in the stomach was in itself sufficient in some instances to induce fatal collapse. He could remember several such cases. He was inclined in Dr. Dickenson's case to attribute more to the stomach than to the heart.

The President could confirm Dr. Bennett's statement. He had no doubt that persons sometimes died from over-distention of the stomach, whether by food or flatus.

Dr. Williams asked how long a period had elapsed between the time of death and the autopsy, and also whether the arteries of the organ had been examined.

Dr. Dickenson believed that the body had not been kept longer than usual. The arteries had been carefully traced, and were found healthy.

Dr. Dickenson next showed a specimen of

DISSECTING ANEURISM OF THE AORTA.

The patient, a policeman, aged about 32, had died about

twelve hours after the sudden supervention of severe thoracic symptoms. The symptoms had commenced without any satisfactory cause, as he was not at the time using any violent exertion. The autopsy showed a dissecting aneurism of the aorta, commencing at a transverse rent in the inner and middle coats, just above the sinus of Valsalva. The blood had passed upwards between the middle and external coats to the descending part of the arch, and to some extent into the left subclavian artery. Lastly, it had ruptured the outer coat, and distended the pericardium.

Mr. Holmes brought forward a specimen of

ANEURISM OF THE INNOMINATE ARTERY.

The patient, a man of about 40, was admitted fifteen months before his death into St. George's Hospital, on account of a pulsating tumour above and behind the right sterno-clavicular joint. It was believed to have commenced suddenly, for the man had been examined not long before, and nothing of the kind detected. After a time the pulsation extended upwards nearly to the middle of the neck. The question as to Surgical treatment was fully discussed and decided against, and the tumour evidently passed downwards into the chest. The man returned home. His last illness was attended by much difficulty in respiration. The preparation showed extensive disease of the arterial coats and tubular dilatation of the arch of the aorta and innominate artery of the latter to a large extent.

Mr. Canton showed specimens of

OSSEOUS NODES OF THE TIBIÆ AND SYPHILITIC DEPOSIT IN BOTH TESTES.

There was no history of the man's antecedents, but the state of his femora and tibiæ sufficiently proved that he had suffered severely from constitutional syphilis. These bones were encrusted over with rough outgrowths of new material, exactly resembling the condition known as osseous nodes. In both testes were large masses of homogeneous fibroid material, well circumscribed, but adhering together at places. The largest of these was the size of a cherry. It was firmer than tubercle, and showed no tendency to break down or disintegrate. Mr. Canton thought that there could be little doubt that these deposits were of syphilitic origin, and resembled those now so frequently met with in the liver and other organs.

Mr. Hutchinson brought before the Society drawings and microscopic preparations illustrating the

IDENTITY OF PITYRIASIS VERSICOLOR AND TINEA TONSURANS.

A child of two years old had been under his care for well-characterised tinea tonsurans on the scalp. The hairs and epidermis showed abundance of the peculiar fungus. The disease had previously affected three of the child's elder brothers and sisters. At one visit, the girl who nursed the child, a healthy, fair-skinned person of eighteen, mentioned that she had some spots on her bosom. On inspecting these, Mr. Hutchinson found them to be typical patches of pityriasis versicolor. The child had been accustomed to sleep with his nurse, and had often rested his head on her bosom. Mr. Hutchinson reminded the Society that he had some years ago brought forward a series of facts in proof of the possibility of contagion between these two diseases, and one in which it had been effected by artificial transference.

Dr. Anstie asked if Mr. Hutchinson had ever met with any converse instances, *i. e.*, in which children had caught ringworm from nurses suffering from pityriasis.

Mr. Hutchinson replied that he had not, but that he quite expected to do, and had long been accustomed to warn mothers suffering from pityriasis that it was very desirable to have it cured, for fear that such contagion should take place. In answer to a remark from Mr. J. Hogg, he said that he did not consider that this proved contagion between two apparently different diseases afforded any support to the idea that all human fungi were one and the same. Ringworm and pityriasis were met with at different ages and in very different parts, and thus their dissimilarities in aspect might be explained. Ringworm and favus might, however, exist together in the same subject and often did so, still retaining throughout great differences in appearance.

Dr. Harley showed a specimen of

RUPTURED HEART

The rupture was a very small one, involving the wall of the left ventricle. At first sight, it appeared to involve only the outer part of the wall, but on closer inspection a small internal opening was found. The muscular tissue of the organ was extensively affected with fatty degeneration.

Dr. Harley also showed a specimen of

ACUTE SOFTENING OF THE HEART.

A gentleman had died, after about two months' illness with pleurisy. At the autopsy the heart was, at first sight, supposed to be fatty, as it was remarkably soft and flabby. On examination with the microscope, however, such was not found to be the case. It presented a remarkably good example of what had been described in Germany as acute softening, the peculiarity being that the muscular fibres fell loosely apart and seemed scarcely to adhere to each other.

MEDICAL NEWS.

Royal College of Physicians.—At the ordinary meeting of the Fellows, held on the 24th inst., and which had been postponed from the 23rd. in consequence of the funeral of His late Royal Highness the Prince Consort, the following gentlemen having undergone the necessary examination, were duly admitted Members of the College :—

Andrew, James, M.B., The College, St. Bartholomew's Hospital
MacLeod, Alexander Charles, of H.M. Madras Service.

Apothecaries' Hall. — Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, December 19 :—

Dane, Thomas, Barrow-hill-place
Ellis, Edward, Fitzroy-square, W.
Gilbert, Edward Gillett, Bilston, Staffordshire
Hugall, Thomas John, Westbourne-square, W.
Kemp, Benjamin, Horbury, Wakefield
Leaf, Walter, Newman-street
Rice, David, Chailbury, Oxon
Tyley, Richard Purnell, Wells, Somerset
Williams, Edward Humphry, Ludgate-street.

The following gentlemen also on the same day passed their First Examination :—

Mann, A. G. A., Evesham, Worcestershire
Mumford, William L., Comara Parva, Suffolk.

APPOINTMENTS.

Bolt.—Robert Andrew Bolt, M.R.C.S. Eng., of Great Suffolk-street, has been appointed one of the District Surgeons of the Royal South London Dispensary, St. George's Cross, Lambeth, *vice* James Neale Earle, M.R.C.S. Eng., L.M., L.S.A. Lond., elected Surgeon.

Bryson.—Mr. Alexander Bryson has been elected one of the Presidents of the Royal Physical Society, Edinburgh, for the Session 1861-2.

Coldstream.—John Coldstream, M.D. Univ. Edin., F.R.C.P. Edin., L.R.C.S. Edin., has been elected one of the Presidents of the Royal Physical Society, Edinburgh, for the Session 1861-2.

Foley.—James Foley, M.R.C.S. Eng., has been appointed Medical Officer for the Killagh Dispensary District, in the Youghal Union, Co. Cork.

Gilchrist.—Mr. G. C. Gilchrist, of Newcastle, has obtained the Medical Scholarship at the Durham University, of the value of 25*l.* a year, and tenable for four years.

Hunt.—Tom Oliver Hunt, M.R.C.S. Eng., has been elected Medical Officer for the Pembridge District, of the Kingston Union, Herefordshire.

Maling.—Edwin Allan Maling, M.R.C.S. Eng., L.S.A. Lond., has been appointed House Surgeon and Secretary to the General Infirmary and Dispensary, Sunderland.

McBain.— James McBain, M.D., St. And., L.R.C.S. Edin., has been elected one of the Presidents of the Royal Physical Society, Edinburgh, for the Session 1861-2.

Taylor.—John Taylor, M.R.C.S. Eng., has been elected Medical Officer the Warblington district of the Havant Union, Hants.

DEATHS.

Arden.—Recently, Christopher Arden, of Dorchester, M.R.C.S. Eng

Corbould.—December 19, Henry Heath Corbould, M.R.C.S. Eng., L.S.A., of Tyndale-place, Islington, Lond., aged 40.

Delafond.—M. Delafond, one of the most talented of the French Veterinary Professors, and appointed only a few months since Director of the Veterinary School, at Alfort, has just died. He was the author of some highly-esteemed works on Veterinary Pathology and Police, as well as of some remarkable researches on the acarus or itch insect.

Freeman.—November 11, of dropsy, at Vingoria, J. E. Freeman, M.D., Assistant-Surgeon 18th Regiment of Bombay Native Infantry, aged 41.

Galliers.—December 13, at Allan Park, Stirling, William Galliers, late Surgeon to the Forces, aged 86.

Graham.—December 17, at Omagh, Ireland, William Graham, M.D. Mar. Coll. Aberd., M.R.C.S. Eng., L.S.A. Lond., late Staff-Surgeon. R.N., and principal Naval Medical Storekeeper and Examiner at the Royal Victoria-yard, Deptford, aged 5 .

Howie.—December 11, at Pleasance, Edinburgh, John Alexander Howie, L.F.P.S. Glasg., aged 22.

MacAndrew.—September 24, at New Plymouth, New Zealand, William MacAndrew, M.D., L.R.C.S. Irel. and L.M., Surgeon to the 57th Regiment.

Pinkerton.—November 21, at Aden, on the homeward passage from India, Archibald William Pultney Pinkerton, M.D. Univ. Edin., F.R.C.P. Edin., L.R.C.S. Edin., Assistant-Surgeon Royal Artillery.

Royal College of Physicians of London.—At a Meeting of the Fellows of the Royal College of Physicians on the 24th inst., made special for the occasion, the following address of condolence to Her Majesty was proposed by the President of the College, seconded by the Senior Censor, and unanimously adopted:—"To the Queen's Most Excellent Majesty.—Most Gracious Sovereign,—We, your Majesty's most dutiful and loyal subjects, the President and College or Commonalty of the Faculty of Physicians of London, humbly offer our sincere expression of condolence and respectful sympathy with your Majesty on the occasion of the lamented death of His Royal Highness the Prince Consort. With the profoundest sorrow for the irreparable loss which your Majesty, the Royal Family, and the nation have sustained, we earnestly pray that the Almighty will give your Majesty strength to bear this great calamity with calmness and resignation."

Remarkable Instance of Longevity. — William Craft, a servant of Washington during the war of 1756, has just died at Rummerville (Virginia), at the age of 128, leaving two sons, the youngest being 97 years of age. Longevity seems to be hereditary in this family, for the father of Wm. Craft died at the age of 132, in 1769, having had his son at the reasonable age of 86. Recently, the Secession General Evans, passing through Rummerville, observed a man, 100 years of age, who was weeping at the door of a house. Inquiring into the reason of his tears, he replied that his father, pointing to another aged man, had been beating him. The General inquiring of the father, who was, indeed, Wm. Craft, what his son had done, was told that he had shown a want of proper respect for his grandmother. This venerable lady, counting 148 springs, still lives, surviving her son. During the battle of the Plains of Abraham, in the Canadian War, Craft received a musket ball in his left breast, which has never been extracted; and some Practitioners are of opinion that his life has been shortened by the disorders caused by the sojourn of the projectile.—*Gazette Médicale.*

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·087 in.
Mean temperature	42·6
Highest point of thermometer	51
Lowest point of thermometer	34·5
Mean dew-point temporature	38·9
General direction of wind	N.W.& N.E.
Whole amount of rain in the week	0·09 in.

NOTES, QUERIES, AND REPLIES.

"He that questioneth much shall learn much."—*Bacon.*

A Subscriber must remember that our contributors would not be very well pleased with the wholesale amputation of titles which he recommends. Information on the Coca may be found in Johnston's "Chemistry of Common Life."

Medical Precedence in India.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Some months ago an addition was made to the Senate of the Calcutta University by the appointment of several new Members, Civilians, Military Officers, Medical Officers, and Barristers. The Civilians were placed in order of precedence at the top of the list, next came a Major; then two Barristers at Law; next the Medical Officers, two of them Doctors of Medicine, and last a Bachelor of Arts. In this case precedence, according to some scale, was apparently aimed at, but the Military rank of the Medical Officers was not observed, for three of them were senior to the Major by date of commission. Nor was the University degree recognised, for Doctors of Medicine were placed after Barristers: whereas, according to the scale of precedence at Her Majesty's Court, a Doctor of Medicine takes precedence of a Barrister who is not a Doctor. One of the Doctors pointed out the error, and requested that it might be corrected. The question was referred to the Governor-General, who is also Chancellor, and the reply was that "a Doctor of Medicine has no rank, social or official, in this country," declining at the same time to re-arrange the order of precedence.

No doubt this may be all correct, and very fastidious of the Doctors to find fault, but it simply suggests the questions, Has a Doctor of Medicine of Edinburgh or Glasgow, London, Oxford, or Cambridge any social or official rank in virtue of his degree? or has he not? Has the Queen's warrant of precedence any signification, and if so, can you explain why so much of it as would affect the status of the Physician is withheld in India? Is there, in short, any other reason for it than the desire so constantly evinced of depreciating the position of the Doctor?

I am, &c.

Bengal. M. D.

Teratology.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the last Number of your Journal a correspondent, who signs himself "A Student, not a Candidate," asks some one to assist him to the use and the sense of the word "Teratology," the derivation and meaning of which have formed part of the questions of the examination papers of St. Andrew's University. He adds that the St. Andrews M.D.'s of his acquaintance cannot help him, and that in forty years' of Medical reading he has not once met with the word. A student of forty years' Medical reading deserves encouragement, and I would suggest that he first refer to some good modern Dictionary of the English Language, say the "Imperial Dictionary," by John Ogilvie, LL.D., published in 1850. Let him turn to "Teratology," and he will find it explained in these words: "A branch of Physiology which treats of the various malformations and monstrosities in the Animal Kingdom."

Having thus learnt its meaning, let the student read the article "Teratology" in the "Cyclopædia of Anatomy and Physiology," edited by the late Dr. Todd, where he will find all the information he requires. Rokitansky's "Pathological Anatomy" may also be perused by your correspondent with advantage. I may add that whatever opinion he may entertain of the test to which the aspirants for Medical honours at St. Andrews are submitted, I think your correspondent might have kept secret the ignorance of his friends, the M.D.'s of that University.

I am, &c. M.D. (not of St. Andrews).

N.B.—I venture to suggest that the words adopted by your correspondent for his signature have been transposed in the printing. Surely they should have been "A Candidate, not a Student."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reply to the question of a correspondent in the last Number of the *Medical Times and Gazette*, permit me to state that he will find the word Teratology in "Mayne's Expository Lexicon," where it is defined as "the name given by Geoffroy St. Hilaire to the study or consideration of monsters or anomalies of organisation." It is derived, as your correspondent suggests, from τέρας and λογος, and a reference to Liddell and Scott's Lexicon will show that Plato and Æschylus employ the word τέρας to designate "a strange monster, abortion; Lat. *monstrum.*"

One of the titles of Geoffroy St. Hilaire's work (of which the first volume was published in 1832) is *Traité de Tératologie.* In 1836 Berger de Xivrey published a very learned and amusing volume, entitled *Traditions Tératologiques.* In Vogel's "Pathological Anatomy" the word Teratology is employed and explained. In the fourth volume of Todd's "Cyclopædia of Anatomy and Physiology" there is an admirable article on Teratology, by Vrolik. These references are probably sufficient to show that the term is one with which Medical students ought to be acquainted. I regret, however, to be obliged to agree with your correspondent that the ideas of many of the candidates for the Degree of Doctor of Medicine at the University are very vague on this point, the most popular idea being that the word in question is derived from *Terra* and λόγος, and is synonymous with geography.

I am, &c.

A Member of the Board of Examiners.

St. Andrews, December 23.

COMMUNICATIONS have been received from:—

Dr. W. Marten Cooke; Dr. Graily Hewitt; Dr. James Jones; Dr. Henry Smith; Dr. James C. Carson; Dr. Conolly; Mr. E. Robinson; Mr. John Ewens; Dr. Gibb; M.D. (not of St. Andrews); A Member of the Board of Examiners, St. Andrews; Dr. W. D. Moore; Mr. C. F. Maunder; Dr. Roth; Dr. Parsons; Mr. R. A. Bolt; Dr. W. Abbotts Smith; Dr. W. Ogle; Mr. W. B. Kesteven.

APPOINTMENTS FOR THE WEEK.

December 28. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Professor Tyndall, "On Light." (Juvenile Lectures.)

30. *Monday.*

Operations at the Royal Free Hospital, 1 p.m.; Metropolitan Free Hospital, 2 p.m.

31. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

January 1. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Orthopædic Hospital, 2 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Council Meeting.

Obstetrical Society of London, 8 p.m. Annual Meeting. The President will deliver an Address.

2. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.

3. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day):—

By Mr. Fergusson—For Cleft Palate; Lithotrity.

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ERRATA.

VOL. I. FOR 1861.

Page 679, col. 1, line 2, *for* "sick clubs," *read* "book clubs."

Page 688, col. 2, line 7, *for* "not under or above 26 years," *read* "not under 21 nor above 26 years."

VOL. II. FOR 1861.

Page 77, col. 1, line 9, *for* "quantitatively," *read* "qualitatively."

Page 80, col. 2, line 7 from bottom, *for* "This range," *read* "His range."

Page 81, col. 1, line 30, *for* "powers," *read* "power."

Page 158, col. 2, line 8 from bottom, *for* "axis," *read* "axes."

Page 249, col. 2, line 35, *for* "998," *read* "1835." Line 38, *for* "80 per cent.," *read* "38·6 per thousand."

Page 250, col. 1, line 2 from bottom, *for* "contraction," *read* "congestion." Col. 2, line 15, *for* "not" *read* "yet." Line 41, *for* "aids," *read* "aid."

Page 251, col. 1, line 4, *for* "prevent," *read* "prevents." Line 15 from bottom, *for* "ulceration," *read* "ulcerations."

Page 278, col. 1, line 15 *for* "is," *read* "was."

Page 363, col. 1, line 26 from bottom, *for* "have," *read* "here."

END OF VOLUME II. 1861.

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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c. &c., contained in the "*Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

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Alſo *vol.* 1, *p.* 320.

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